

Study of Genius



by
N.K. Royse



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Study of Genius * * * * *
* * * * * * * By N. K. Royse.



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PREFACE.

“Another book on Genius! Why, if all the works already printed on this subject were collected, they would form no small library in themselves.”

Your point is well taken, my critic. Many and divers are the books on genius. What, however, is remarkable in this matter is, that each of these many works treats of but a single phase of this really complex subject. One discusses genius in its relations to *heredity*; another investigates its connection with *insanity*; a third sets forth the *self-consciousness* of genius; a fourth, the *precociousness* of genius; a fifth pictures the *environments* of genius; while others still are mere collections of *anecdotes*, designed more for the entertainment of readers than for the elucidation of any special aspects of genius.

In view, therefore, of the very special nature of the works heretofore published on the subject of genius, it has seemed to the present writer that there was still room for

a treatise whose aim is a comprehensive view of the separate divisions of the subject already considered, to the end of generalizing therefrom a tolerably definite conception of the real nature of genius, and of the conditions of its rise and development.

What are the essential elements of genius? what the relations as to cause and effect of genius and its environments? what the opportunities of the present and the future for the rise of geniuses, as compared with those of the past?—These are the main themes which it is the special province of this work to consider.

The author gratefully acknowledges his obligations to preceding writers on this subject for the abundant and carefully selected data their works have supplied; and trusts that his inductions from the same, while they may not be unworthy of these suggestive materials, may satisfactorily account for the appearance of his own work among the already large family of books on genius.

N. K. ROYSE.

CINCINNATI, OHIO.

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A STUDY OF GENIUS.

CHAPTER I.

DEFINITIONS OF GENIUS.

Ancient Application of the Word Genius—Its Employment in this Work.—Imperfect Knowledge of the Parentage and Early Surroundings of Geniuses.—Cause of the Varying Definitions of Genius.—Is Genius Originality? Opinions of Dr. Johnson, Emerson, Talfourd, Addison, Dryden, Crabbe, Willis, Bulwer, Hazlitt, Lowell, Bain.—Is Genius Anticipation? Views of Longfellow, Macaulay, Alison.—Is Genius Breadth? Opinions of Emerson, Carlyle, Longfellow, Lowell, De Quincey, Grant Allen.—Is Genius Constructiveness? Opinions of Emerson, Matthew Arnold, Taine.—Is Genius Concentration? Opinions of Goethe and Johnson.—Is Genius Patience? Opinion of Buffon.—Is Genius Common Sense?

The word genius, we are told, is a Latin translation of a Tuscan term which signifies *generator*, and the ancient Romans employed it to designate the tutelary god, or demon, who was supposed to preside over the birth and destiny of every male; the immortal who performed a similar office for females being

called a Juno. Places, also, and inanimate objects, were fabled to have their genii. These, in the case of persons, were sometimes supposed to accompany them in pairs—a white, or auspicious genius, and a black, or fatal one. By others still the genius was regarded as being black and white by turns. To these genii, however conceived, divine honors were invariably paid, and their favorable disposition was invoked, particularly on birthdays, by offerings and sacrifices.

Query: Was it an induction from their experience, a freak of masculine unfairness, a prophetic intuition, or a mere verbal preference, that caused the Roman to restrict the birth-presiding *genius* to the male sex? Whatever be the explanation, certain it is that the history of mankind, both ante and post Roman, has vindicated the sagacity of the ancient limitation, by discovering almost every instance of genuine genius among the males of the human family.

Moreover, the latest utterances of modern science would have us regard the female as the conservative factor in reproduction,

and all new variations as caused by the influence of the male.

Genius, according to its first—its Roman acceptation, became greatly changed, like many other conceptions of classic mythology, as paganism declined; until, finally, surrendering all its supernatural elements, it came to mean any special bent or aptitude of the human mind; as when we speak of a genius for painting, or for poetry, or for music, or for statecraft, and so forth. Somewhere between the foregoing extreme conceptions, we apprehend, and partaking somewhat of the nature of both, is the mysterious-familiar, the divine-human quality, genius, which we purpose to make the subject of our present study.

DEFINITIONS OF GENIUS.

What is genius? If we may test this question in the crossing lights of the many answers that have been proposed, we may pronounce it a riddle worthy to have issued from the stony lips of the Egyptian Sphinx, or one of equal perplexity to the time-hon-

ored inquiry, What is Truth? or the conundrum of modern science, What is Life?

One difficulty, perhaps the main one, that lies in the way of arriving at a satisfactory solution of the question, is the scantiness of our knowledge concerning the parentage and earliest surroundings of men of genius very generally. Emerson has said that "Great geniuses have the shortest biographies." We can not concur in this statement; for, if we have read history aright, it is but little more than a compendium of the biographies of the world's greatest men. If we except a few—comparatively a very few—and those the men who have flourished in the morning hours of their country's existence or of certain historic epochs, such, for example, as Homer, Solon, Pythagoras, Chaucer, Herodotus, Phidias, Alfred the Great, we shall find that the history of the world is quite satisfactory in its presentation of the leading acts of the lives of the most influential of the human family.

It does, however, very frequently fail to throw any light, or, at best, a very partial

and fitful one, upon the characteristics of the parents of geniuses and the environments of their earlier years. And this, it can not be denied, is a very grave, if not fatal, omission. It is one of the fundamental laws of mechanics that, in order to determine the direction a body will take and the momentum at which it will move, it is necessary to know the number, direction, and velocity of the bodies that impinge upon it. Just so, we claim, in order to comprehend the nature of genius and the laws that govern its evolution, it is first necessary that we become acquainted with those vital forces—the physical, mental, and moral peculiarities of parents—that enter into the constitution of the child, and also that earliest environment of persons, places, and things, that more or less modifies the tendencies of original endowment.

Those, therefore, who have studied genius with a view to formulating a definition of it, have been obliged, for the greater part, to interpret it by its more material manifestations, rather than by its primal characteristics—its most nearly spontaneous energies. They

stand, as it were, upon the bank of a mysterious river, and catching up a glassful of its apparently homogeneous water, endeavor to discover therein the multitudinous, widely different, and mutually modifying elements of the several lesser streams that have contributed to its volume. Is it any wonder that there should be a great diversity of opinion, seeing that each experimenter occupies a different stand-point—one being probably near the headwaters, another not far from the mouth, and a third midway between these two? It could hardly be otherwise. Since, then, our knowledge of geniuses can not be drawn, except in a few cases, from the most desirable sources, let us consider, in our present study, the best information we can obtain upon the subject, and extract from it what satisfaction we may be able.

IS GENIUS ORIGINALITY?

In formulating a definition of genius, or, presuming it to be a composite, in enumerating the elements that enter into its composition, we venture to say that *originality* is the first that suggests itself to the mind.

We can not conceive of genius except as something extraordinary, and of this quality originality is the very essence. The meaning of the word originality—the quality of being first, whether in the discovery or the enunciation of a truth—the quality of being unlike all others—of being unique—of being self-sufficient—the distinction of being the source, the spring, the archetype of all that goes to make up each of the various currents of thought, of feeling, and of action that prevail among men—this preëminence belongs most obviously to him whom we call a genius. Not that this is the only belonging, but, assuredly, that it is the most obtrusive, startling, and dazzling facet of the human diamond.

What, doubtless, makes this phase of genius—if it be simply a phase—so readily perceptible to us, is our natural yearning for the novel—our uncontrollable curiosity—our untiring quest for something unlike all the ordinary happenings of experience. And very probably when we have found our unique, we may not like him; for he shocks

our ideas, ignores our formalities, and mutilates, if he does not completely overturn, our idols, whether of the hand or the mind.

In the opinions that follow, we shall endeavor to ascertain in how far this brilliant quality, originality, may be accepted as the synonym for genius.

Doctor Johnson says, in his essay on Milton, that "The highest praise of genius is original invention." In this view Emerson evidently coincides, for he declares, in his essay on Intellect: "To genius must always go two gifts, the thought and the publication. The first is revelation, always a miracle which no frequency of occurrence or incessant study can ever familiarize, but which must always leave the inquirer stupid with wonder. It is the advent of truth into the world, a form of thought now for the first time bursting into the universe, a child of the old eternal soul, a piece of genuine and immeasurable greatness. It seems, for the time, to inherit all that has yet existed, and to dictate to the unborn."

The same author, in his volume on Repre-

sentative Men, asserts: "The highest merit we ascribe to Moses, Plato, and Milton, is that they set at naught books and traditions, and spoke not what men, but what *they* thought. . . . He is great who is what he is from nature, and who never reminds us of others." And farther on he adds: "Every great man is a unique." George Eliot declares: "Genius itself is not *en règle*; it comes into the world to make new rules."

Accordant with the foregoing is the opinion of Thomas N. Talfourd, as expressed in his article on The Author of Waverly. He says: "On the whole, genius has privileges of its own; it selects an orbit for itself."

Doubtless it is to men who possess genius of the foregoing variety that Addison refers in the following passage: "Those who by the mere strength of natural parts, and without any assistance of art or learning, have produced works that were the delight of their own times, and the wonder of posterity. There appears something nobly wild and extravagant in these great natural geniuses, that is infinitely more beautiful than all the

turn and polishing of what the French call a *bel esprit*, by which they would express a genius refined by conversation, reflection, and the reading of the most polite authors." Of geniuses of this class, he names Homer and Shakespeare.

The poets also bear their testimony to the foregoing conception of genius. Dryden writes:

"Time, place, and action may with pains be wrought,
But genius must be born, and never can be taught."

Crabbe exclaims:

"Genius! thou gift of Heaven! thou light divine!"

Willis sings:

"They say that he has genius. I but see
That he gets wisdom as the flower gets hue,
While others hive it like the toiling bee;
That with him all things beautiful keep new."

And Bulwer chimes in:

"Genius, the Pythian of the Beautiful,
Leaves its large truths a riddle to the Dull—
From eyes profane a veil the Iris screens,
And fools on fools still ask—what Hamlet means."

Hazlitt, in his *Table Talk*, follows in pretty much the same train of thought, except that he goes a step farther, and essays to tell us

what originality is. He says: "Genius, or originality, is, for the most part, some strong quality in the mind, answering to and bringing out some new and striking quality in Nature. . . . It is sufficiently exclusive and self-willed, quaint and peculiar. It does some one thing by virtue of doing nothing else; it excels in some one pursuit by being blind to all excellence but its own. It is just the reverse of the chameleon, for it does not borrow, but lends its colors to all about it; or, like the glow-worm, discloses a little circle of gorgeous light in the twilight of obscurity, in the night of intellect, that surrounds it. . . . This is the test and triumph of originality, not to show us what has never been, and what we may, therefore, very easily never have dreamt of, but to point out to us what is before our eyes and under our feet, though we have had no suspicion of its existence, for want of sufficient strength of intuition, of determined grasp of mind to seize and retain it. . . . Originality is the seeing Nature differently from others, and yet as it is in itself." He names Rembrandt

and Wordsworth as being notable illustrations of his definition of originality.

Precisely the same thought as the last one is that of Lowell's, in his essay on Chaucer, which runs: "To make the common marvelous, as it were a revelation, is the test of genius."

Bain, in his work on the Study of Character, after referring to two partial definitions of genius, says: "The third meaning, that I would especially advert to, is, I think, the most appropriate of all. I refer to the power of Originality, Invention, Discovery, Creation, as opposed to the mere mastery (no matter how skillful and effective) of what has been already known. . . . The principle of like recalling like, through the disguises of diversity, this I count the *leading fact* of genius. . . . A naturalist may be original by traversing an unexplored field—the proof of genius is to make discoveries in a well-paced track."

IS GENIUS ANTICIPATION?

Another conception of genius is that it is the power to foresee or anticipate truths or

the issues of passing events. Longfellow evidently had this view in mind when he penned the following lines in *Hyperion*: “It has become a common saying, that men of genius are always in advance of their age; which is true. There is something equally true, yet not so common; namely, that, of these men of genius, the best and bravest are in advance not only of their own age, but of every age. As the German prose-poet * says, every possible future is behind them.”

Macaulay, in writing of Dryden, illustrates the above idea as follows: “The sun illuminates the hills while it is still below the horizon, and truth is discovered by the highest minds a little before it becomes manifest to the multitude. This is the extent of their superiority. They are the first to catch and reflect a light which, without their assistance, must in a short time be visible to those who lie far beneath them.”

Not only the same idea, but the same method of presenting it, was present with

* Richter.

Alison when, in his essay on Bossuet, he wrote: "The greatest intellect perceives only the coming light; the rays of the rising sun strike first upon the summits of the mountains, but his ascending beams will soon illuminate the slopes on their sides and the valleys at their feet."

IS GENIUS BREADTH?

The preceding definitions have represented genius as an extraordinary development of human nature in some one of its many tendencies; the definition now presented is entirely different from these, in that it would have genius to signify extraordinary compass—universal grasp.

Emerson, in *Representative Men*, queries: "What is a great man but one of great affinities, who takes up into himself all arts, sciences, all knowables, as his food." And elsewhere he declares: "Great men are more distinguished by range and extent than by originality."

But not only in the sweep of his abilities, in the jurisdiction of his influence also, is the genius a universal being. Carlyle, in his

criticism on Boswell's Life of Johnson, holds: "The great man does, in good truth, belong to his own age; nay, more so than any other man; being properly the synopsis and epitome of such age, with its interests and influences: but he belongs likewise to all ages, otherwise he is not great. What was transitory in him passes away; and an immortal part remains, the significance of which is in strict speech inexhaustible. Aloft, conspicuous, on his enduring basis, he stands there serene, unaltering; silently addresses to every new generation a new lesson and monition." In his *Heroes and Hero-Worship*, the same writer, in defining the potentiality of a genius, expresses himself in these words: "I confess, I have no notion of a truly great man that could not be *all* sorts of men."

The same uncommon sort of being was, doubtless, in Longfellow's mind when he wrote:

"The archetypal man, and what might be
The amplitude of Nature's first design."

Again, this same extraordinary largeness and vigor of nature is cited by Lowell, in his

essay on Wordsworth, when defining originality. He says: "What we call originality seems not so much anything peculiar, much less anything odd, but that quality in a man which touches human nature at most points of its circumference, which reinvigorates the consciousness of our own powers by recalling and confirming our own unvalued sensations and perceptions, gives classic shape to our amorphous imaginings, and adequate utterance to our own stammering conceptions or emotions."

Quite different in the terms of its statement, though quite as effectively expressive of the same idea of extraordinary breadth, is De Quincey's definition of genius. He writes: "Genius is that mode of intellectual power which moves in alliance with *genial* nature—*i. e.*, with the capacities of pleasure and pain, whereas talent has no vestige of such an alliance, and is perfectly independent of all human sensibilities; consequently genius is a voice or breathing which represents the total nature of man, and therefore his enjoying and suffering nature;

whilst, on the contrary, talent represents only a single function of that nature."

Perhaps the most moderate statement under this head, though still an emphatic one, is that of Grant Allen in a recent essay. He says: "The peculiarity of a genius is, that he possesses in some one department a few more elements of mind than most other people his contemporaries; that he combines in himself a certain large number of mind-factors, all, or nearly all, of which are to be severally found in other people, but which are not to be found in any other one person in the same combination."

IS GENIUS CONSTRUCTIVENESS ?

Emerson says: "Genius is intellect constructive." Matthew Arnold would seem, from the following passage, to entertain a similar opinion. He writes: "Creative literary genius does not principally show itself in discovering new ideas; this is rather the business of the philosopher. The grand work of literary genius is a work of synthesis and exposition, not of analysis and discovery; its

gift lies in the faculty of being happily inspired by a certain intellectual and spiritual atmosphere, by a certain order of ideas, when it finds itself in them; of dealing divinely with these ideas, presenting them in the most effective and attractive combinations—making beautiful works with them, in short.”

And in our next citation, Taine shows us how completely Milton exemplified the last definition of the province of genius. He says: “He wrote, not by impulse, and at the mere contact with things, but like a man of letters, a classic, in a scholar-like manner, with the assistance of books, seeing objects as much through previous writings as in themselves, adding to his images the images of others, borrowing and recasting their inventions, as an artist who unites and multiplies the baser and driven gold already entwined on a diadem by twenty workmen.”

IS GENIUS CONCENTRATION?

“Genius is concentration,” says Goethe; and Johnson concurs in this view.

IS GENIUS PATIENCE?

Precisely this is what Buffon defines it to be.

IS GENIUS COMMON SENSE?

A modern writer, in an essay in *Temple Bar*, declares: "Genius is, after all, only common sense working at a very high level."

CHAPTER II.

IS GENIUS MADNESS?

*Affirmative Views of Plato, Aristotle, Pascal, Diderot, Lamar-
tine, and Dryden.—A Full Discussion of the Question,
by James Sully.—Varieties of Mental Unsoundness—
Absence of Mind, Persistence of Vivid Ideas, Hallucina-
tions, Extreme Violence of Temper and Self-Insistence,
Ungovernable Physical Appetites, Melancholy and Hypo-
chondria, Definite Mental Diseases, Whimsicalness, Incon-
sistency—with Examples of Each.—Explanation of the
Foregoing.*

Not a few of those who have written concerning genius have expressed the belief that it is a species of mental unsoundness, or, at least, that it is not unfrequently accompanied by that disorder. The difference between being *Epiphanes* (illustrious) and *Epimenes* (mad) is, in the popular regard, quite as slight in fact as it is in print. Plato went so far as to intimate that the name seer ($\mu\acute{\alpha}\nu\tau\iota\varsigma$) was derived from the verb $\mu\alpha\iota\upsilon\omicron\mu\alpha\iota$, to rage, or to be mad. Aristotle, who is allowed to have been the most nearly scientific and the shrewdest observer of antiquity, claimed that

geniuses universally have been melancholic and tinctured with positive madness. Pascal remarks that "Extraordinary wit is the neighbor of extraordinary madness." Diderot laments, "Oh! that genius and madness should so nearly touch each other!" while Lamartine affirms that "Genius carries in itself a principle of destruction, of death, of madness, as the fruit carries the worm." Dryden's oft-quoted lines will doubtless occur to the reader—

"Great wits are sure to madness near allied,
And thin partitions do their bounds divide."

The fullest and fairest presentation of this aspect of the present question we have ever met with, is embodied in a recent article in the *Nineteenth Century*, from the pen of James Sully. As our best means of treating the point before us, we shall take the liberty of presenting a synopsis of the article, together with illustrative extracts from the same.

Alluding to the classic notion of genius—its being a supernatural possession—our

author remarks: "The poet was conceived of as infuriated or driven mad by the god; and a somewhat analogous effect of divine intoxication was recognized by Plato as constituting the essence of philosophic intuition. Hence, Greek and Roman literature abounds with statements and expressions which tend to assimilate the man of genius to a madman." But madness in those days was not regarded as either a pitiable or degrading affection. "So far from this, it was a common idea that the insane were themselves inspired by the action of a deity.

"The influence of Christianity and of the Church served at first to brand mental derangement with the mark of degradation. This debasement of the idea of madness had, however, no appreciable effect in dissolving the companionship of the two ideas in popular thought; for the attitude of the Church was, for the most part, hostile to new ideas, and so to men of original power. The transition to the modern period introduces us to a new conception both of genius and insanity. We have learned to see in it (genius)

the highest product of Nature's organic energy, the last and greatest miracle of evolution. On the other hand, the modern mind has ceased to see in insanity a supernatural agency. Nevertheless, we meet in modern literature with an unmistakable tendency to maintain the old association of ideas. Genius is now recognized as having a pathological side, or a side related to mental disease.

“The writers who have made the subject their special study agree as to the central fact, that there is a relation between high intellectual endowment and mental derangement, though they differ in the way of defining this relation.”

Our essayist then proceeds to enumerate the various grades of mental disturbance that have appeared in connection with men of extraordinary mental endowments.

First, there is that extreme state of abstraction known as absence of mind; of which Archimedes, so absorbed in a problem as not to be aware of the approach of his Roman slayer; Newton judging from the

plate that a prankish friend had emptied that he had really eaten his dinner; Beethoven standing in his night-clothes before an open window; purblind Doctor Johnson striving to read the time upon the dial of the town clock; Adam Smith, the distinguished writer on political economy, walking twelve miles one Sunday morning along the king's highway, and presenting himself in a crowded church clothed solely in his night-gown, are examples.

Next in the line of mental degeneration is named the persistence of vivid ideas; illustrated by such instances as Johnson's repugnance to certain alleys of London; Madame de Staël's belief that she would suffer from cold when buried; Pascal's fear of a gulf yawning just in front of him, so overpowering at times as to compel his being chained to keep him from leaping forward; Cæsar Augustus almost convulsed by the sound of thunder, and trying to flee from it; Peter the Great afraid to cross a bridge; Pythagoras preferring death to passing through a field of beans; Scott opposed to visiting Melrose

Abbey by moonlight for fear of bogles; Marshal Saxe terrified at sight of a cat; Byron refusing to help anyone to salt at table, or to be helped himself; Luther, Baxter, and Wesley each believing in witchcraft; Scaliger trembling at the sight of water-cresses; Schiller keeping a drawer of rotten apples in his study as a necessity of living and working; Rousseau imagining a phantom continually by his side; Luther seeing the devil personally present in his study, and throwing an inkstand at his head, and Mozart writing his requiem at the behest of a mysterious "man in black."

Hallucinations constitute the next phase of mental derangement considered, exemplified in the cases of Luther, Malebranche, Descartes, Johnson, Pope, Byron, Shelley, Napoleon, Schumann, and even the well-balanced Goethe.

Extraordinary violence of temper and insistence of self, a still more pronounced form of intellectual unsoundness, is met with in such eminent persons as Pope, Johnson, Swift, Byron, Carlyle, Voltaire, Rousseau,

Beethoven, Herder, and Schopenhauer. Voltaire, while living in the house of the Marquis de Villette, at Paris, became so incensed one day on coming to the table and not finding his own particular cup in its place, as, in the presence of a most distinguished company, to exclaim in the harshest terms against the domestics that waited upon him, and forthwith betake himself to his own apartment and shut himself up. Jeffrey says, in substance, of Dean Swift, that on visiting a family, even for the first time, he would prescribe the hours for their meals, sleep, and exercise, and rigorously insist on their observance; that he was never at ease unless allowed to nickname the lady of the house and indiscriminately lampoon her acquaintances; that at the deanery he sometimes even chased his domestics up and down stairs with a large whip; that on first visiting his curate's house he announced himself as his master, took possession of his fireside, and ordered his wife to take charge of his shirts and stockings; and that, in fine, he valued all men only in so far as

they were content to submit themselves to his own arrogance and tyranny. Dante was wont to throw stones at his enemies in his younger days. Once, walking along the streets of Florence, he met an ass-driver who, as he sang certain passages from the poet's book, occasionally interjected an "Arri" to urge on his beast. Dante, incensed beyond all control, struck the fellow a severe blow, exclaiming, "That 'Arri' was not put in by me." When Gorner, a talented organist, struck a wrong chord at rehearsal, Bach tore off his wig, and, throwing it at the organist's head, thundered out, "You ought to have been a cobbler instead of an organist." Handel is said to have soundly berated and sworn in several different languages at certain singers, because they did not properly read at first sight the text of the chorus, "And with His stripes we are healed."

As completing the last-named class of mental derangements, such positive moral obliquities as an appetite for physical stimulants and addiction to sexual excesses are

instanced, one or both of which have found victims in such men as Æschylus, Ennius, Eupolis, Ben Jonson, Burns, Poe, Villan, De Musset, Günther, Bürger, De Quincey, Coleridge, Schiller, Blackstone, Sheridan, Addison, Handel, and Gluck.

A more plainly recognizable class of cases than any of the foregoing, is to be met with in those who have exhibited an intense melancholy or hypochondria. Aristotle names such eminent ancients as Empedocles, Socrates, and Plato as examples of this form of abnormal development. So acute has this distemper become with some as to drive them to an attempt to take their own lives, as instanced in the career of Goethe in the Werther days; in Beethoven shut out from society by deafness; in Chateaubriand and George Sand in their earlier days; in Cowper trying to hang himself; in Saint-Simon, who attempted to blow out his brains; in Alfieri tearing off the surgeon's bandage that he might bleed to death; in Schumann casting himself into the Rhine, and in Chatterton and Kleist, poets, and in Beneke, the philosopher, who actually did commit suicide.

The next degree of madness embraces men of genius who have suffered from clearly developed mental disease. Sophocles, the Greek tragic poet; Linnæus, the botanist; the poet Southey; Swift; Zimmerman, the author of "Solitude," and Scott are named as examples of senile dementia. Other instances in which the disorder manifested itself at intervals throughout the more active periods of life, necessitating a confinement of the subject, are met with in the persons of Richelieu, Charles Lamb, Cowper, Handel, Comte, Tasso, Donizetti, and Schumann. Allied to the foregoing are the number of those who have died from nervous disorders, to wit: Pascal, Kepler, Cuvier, Rousseau, Mozart, Mendelssohn, and Heine. Of those who suffered periodically from the last-named cause, there may be mentioned Molière, Alfieri, Paganini, Schiller, and George Eliot.

And lastly, come the cases of those in whose families insanity or some acute nervous disorder has existed. Chateaubriand's father died of apoplexy; Schopenhauer's

grandmother and uncle were imbecile; Richelieu, Diderot, Hegel, and Lamb had insane sisters; while one of Mendelssohn's sons became insane.

In addition to the foregoing phases of mental derangement obtaining among men of genius, and particularized by Mr. Sully, we feel warranted in noticing two others. The first we would call whimsicalness, or the subjection of the whole intellectual nature of the man to the tyranny of some petty, childish humor. Examples of this are by no means rare.

Haydn had to have his hair carefully dressed, his best clothes put on, and a certain diamond ring presented him by Frederick II. placed upon his finger before he could summon a single idea. Bacon, in spring, would expose himself to the rain in an open coach, to receive "the benefit of irrigation," which he believed was "most wholesome because of the niter in the air, and the universal spirit of the world." Sarti, the composer of sacred music, obliged himself to work in the dark, declaring that light

of any sort disconcerted him. Dryden, when about to enter on literary work, had himself bled to clear his brain, and then ate raw meat to stimulate his imagination. Handel found the grave-yard of some village church his most congenial place for composition. A bath and a clean linen shirt with full-frilled bosom were the indispensable conditions upon which Buffon's mind consented to work. The eminent French writer, Montaigne, would not sit down to write without having a favorite cat at his elbow. Milton would not attempt to compose except between the vernal and autumnal equinoxes. Franklin had a plate of bread and cheese by his side when studying, to repair mental waste, as he affirmed, and also to save time. Doctor Johnson had an insatiable appetite for fish-sauce and veal-pie, an unquenchable thirst for tea, a habit of touching posts as he walked the streets, and of treasuring up bits of orange-peel; kept the queerest kind of fellow-lodgers, such as blind old women, cats, and negroes, and was a firm believer in ghosts. Goldsmith indulged in reading abed,

and would extinguish his light by throwing his slipper at it. Thèophile Gautiere had faith in magic and in dreams, avoided crossed knives, ran away from an overturned salt-cellar, and grew pale with fright before three lighted candles. "It was one of my fancies," says Audubon, "to be ridiculously fond of dress; to hunt in black satin breeches, wear pumps when shooting, and dress in the finest ruffled shirts I could obtain from France."

The other additional phase of mental unsoundness that we would call attention to is what we would class as mental inconsistency, or contradiction. We meet with illustrations of this infirmity in Sir Thomas More fiercely prosecuting for opinion while advocating the rights of thought; Bacon teaching morals while taking bribes; La Fontaine writing intrigues while personally avoiding a single amour; Young perpetrating wretched puns and penning Night Thoughts; Sterne beating his wife and permitting his mother to hunger, but crying over a dead ass; Cowper, feeble and despondent, conceiving the laughable story of John Gilpin.

Handel, the composer of the sublimest of oratorios, was a glutton. The elder Dumas would not only occasionally depose his servants and cook his own dinner, but actually wrote a cook-book; and while at one time he would spend his money with the utmost recklessness, at another he would practice all manner of ingenuity to avoid his creditors. Pope, the lampooner of nearly all the prominent *literati* of his day, was personally a notorious coward. Thomas Moore, who realized more than thirty thousand pounds from his writings, subjected his family to actual privation. Newton, the illustrious mathematician and astronomer, was unable to make out his own change in ordinary money transactions. Oliver Goldsmith set forth the joys of domestic life with great fervor and simplicity, and yet his life was passed in a garret, and he was practically a stranger to the comforts and felicities of home. Richard Steele wrote admirable essays on temperance—when he was not drunk; and Doctor Johnson expatiated with eloquence and truth upon politeness, who himself was a boor and a glutton.

In proceeding to account for the foregoing melancholy data, Mr. Sully observes that "Keeness of sensibility, both to physical and mental *stimuli*, is one of the fundamental attributes of the original mind. The fine nervous organization, tremulously responsive to every touch, constitutes in itself, in this all-too-imperfect world of ours, a special dispensation of sorrow. Hence the dark streak of melancholy which one so often detects in the early years of the great man." Parenthetically, we would observe that all the most famous racers have been noted for their nervous energy, their high spirit and courage—Flora Temple, Dexter, Goldsmith Maid, Rarus, Jay-Eye-See, and Maud S., for example. May not the same fact be alleged with equal propriety of all the men and women who have made remarkable records in the race of life?

But let us attend farther to Mr. Sully.

"As the biography of the man of genius often tells us, he is apt to become aware, at a painfully early date, that his exceptional endowments, and the ardent, consuming

impulses which belong to them, collide with the utilities and purposes of ordinary life. The soul intent on dreaming its secret dream of beauty is unfit for the business which makes up the common working-life of plain, prosaic men. Hence the profound solitude of so many of earth's great ones, which even the companionships of the home have not sufficed to fill up. Such isolation is distinctly unfavorable to mental health. It profoundly affects the emotional nature, breeding melancholy, suspicion of others, misanthropy, and other unwholesome progeny."

He remarks farther: "If the rich biographical literature of modern times teaches us anything, it is that original production is the severest strain of human faculty, the most violent and extraordinary form of cerebral action. At the moment of productive inspiration the whole being is agitated to its depths, and the latent deposits of years of experience come to the surface. This full spring-tide of imagination, this cerebral turmoil and clash of currents, makes the severest

demand on the controlling and guiding forces of volition.

“Great artistic works are not always flashed into the world by this swift, electric process. There are others besides Carlyle to whom spiritual parturition has been largely an experience of suffering, the pangs being but rarely submerged in the large, joyous consciousness that a new idea is born into the world.”

Of the two sole agencies opposed to these destructive tendencies—namely, a robust constitution and strength of will—he writes: “But such robustness of bodily health seems by no means the rule. The number of puny and ill-formed men who have achieved marvelous things in intellectual production is a fact which has often been remarked on. So common an accompaniment of great intellectual exertion is defective digestion, that an ingenious writer has tried to show that the maladies of genius have their main source in dyspepsia.”

In speaking of the second resisting agency, the force of will, he continues: “The sense of a *quasi* exterior pressure and compulsion

is attested by more than one child of genius. In some cases, more particularly, perhaps, among 'tone-poets,' we find this mastery of the individual mind by the creative impulse assuming the striking form of a sudden abstraction of the thoughts from the surroundings of the moment. And, throughout the whole of the creative process, the will, though, as we have seen, exercised in a peculiarly severe effort, is not exercised fully and in its highest form. There is no deliberate choice of activity here. The man does not feel free to stop or to go on. On the contrary, the will is in this case pressed into the service of the particular emotion that strives for utterance, the particular artistic impulse that is irresistibly bent on self-realization.

"Our conclusion is, that the possession of genius carries with it special liabilities of the disintegrating forces which environ us all. It involves a state of delicate equipoise, of unstable equilibrium, in the psycho-physical organization. Paradoxical as it may seem, one may venture to affirm that great original

power of mind is incompatible with nice adjustment to surroundings, and so with perfect well-being. The genius is a scout who rides out well in advance of the intellectual army, and who by this very advance and isolation from the main body is exposed to special perils. Thus genius, like philanthropy or conscious self-sacrifice for others, is a mode of variation of human nature which, though unfavorable to the conservation of the individual, aids in the evolution of the species."

CHAPTER III.

IS GENIUS MADNESS?—CONCLUDED.

Negative Views of Charles Lamb, Coleridge, Dr. William G. Stevenson.—Opinions of Ancients of no Scientific Value.—All Varieties of Mental Disorder More Common among Men of Meager or no Abilities than among Geniuses.

The view presented in Chapter II. of the intimate relationship existing between genius and insanity, sanctioned though it is by the voice of antiquity, and by influential opinions of almost all subsequent ages, has its opposers, strenuous and weighty, if not numerous. Among them is one who, in view of his sister's well-known insanity, and his own pronounced eccentricities, might very naturally be supposed to be sensitive on the subject; we mean Charles Lamb. In his essay on the Sanity of True Genius, he utters this protest: "So far from the position holding true, that great wit (or genius, in our modern way of speaking) has a necessary alliance with insanity, the greatest wits, on

the contrary, will ever be found to be the sanest writers. It is impossible for the mind to conceive of a mad Shakespeare. The greatness of wit, by which the poetic talent is here chiefly to be understood, manifests itself in the admirable balance of all the faculties."

Coleridge, too, in his *Biographia Literaria*, bears the following testimony: "The men of the greatest genius, as far as we can judge from their own works or from the accounts of their contemporaries, appear to have been of calm and tranquil temper in all that related to themselves. Through all the works of Chaucer there reigns a cheerfulness, a manly hilarity, which makes it almost impossible to doubt a corresponding habit of feeling in the author himself. Shakespeare's evenness and sweetness of temper are almost proverbial in his own age." Speaking of Spenser, he says: "Nowhere do we find the least trace of irritability, and still less of quarrelsomeness or affected contempt of his censurers." "The same calmness, and even greater self-possession, may be affirmed of

Milton, as far as his poems and poetic character are concerned.”

What, however, we regard as the best defense of the sanity of genius is an article by Dr. William G. Stevenson, in the *Popular Science Monthly* for March, 1887, and which, indeed, was written as a reply to the article of Mr. Sully, already presented. We shall aim to reproduce its main points in a few brief quotations.

The opinions of the ancients regarding the psychological nature of genius, Doctor Stevenson summarily sets aside, upon the ground of their profound ignorance concerning the essential nature of mind. His stand-point is that of modern times, and the subject is treated under the restriction of modern definitions.

Allowing the various examples cited by Mr. Sully, wherein great geniuses have revealed themselves as the victims of illusions, hallucinations, and delusions, and as subjects of the most glaring eccentricities, he remarks: “But these peculiarities or eccentricities are not essentially morbid,

neither do they give affirmative evidence that genius is related to madness. Such peculiarities belong to all orders of mind—the humble as well as the exalted—and can not, therefore, have an exclusive application.”

Concerning the exhibition of violent passions upon the part of men of genius, he says: “This I do not deny, but yet affirm that the violent passion at times observed in one of exalted powers of mind is no more evidence in favor of the kinship between these powers and mental disease, than is the same passion, when displayed in a low and vulgar mind, proof that stupidity is a congener of madness.

“Because Goethe, Chateaubriand, George Sand, and Johnson have said that at times they felt an impulse to commit suicide; because Beethoven, Schumann, and Cowper, who were at times morbid, really made the attempt; and Kleist, Beneke, and Chatterton succeeded in self-destruction—we are not justified in saying that the impulse or the act itself came because genius contains an element of madness. Hundreds who com-

mit suicide every year do not possess genius; why, then, make it the responsible agent for the few?

“Since genius is itself exceedingly rare, and its union with insanity still less frequently found, it is evident that suicide, although occasionally committed by those of exalted minds, is altogether too infrequent among them to justify us in claiming it as evidence in behalf of the insanity of genius.

“Nervous and mental diseases are too common among all classes of people and orders of intelligence, to permit us to think that genius is the special object of their dominion.

“That genius ‘has its roots in a nervous organization of exceptional delicacy,’ is undoubtedly true; but it does not necessarily follow that the liability to mental disorder and confusion is thereby increased, because this delicacy of brain-structure and its functions are admirably adjusted, and the very perfection of the mechanism enables it to work with the least possible friction or injury.

“In conclusion, I hesitate not to say that the most illustrious names of ancient or modern times—in all departments of human thought or activity—have been, with but few exceptions, loyal to the sovereign rule of sane reason; and the sweep of their imaginations has been on curves which rounded in the bright empyrean of truth and beauty.”

CHAPTER IV.

IS GENIUS CHARACTER?

*Affirmative Opinions of John Burroughs and De Quincey.—
Negative Opinion of Lowell.*

All the views heretofore had of genius have treated it purely as an intellectual force. The one we now present differs from these in regarding genius in the light of a great moral power.

John Burroughs, writing on the subject, says: "Indeed, there is a strict moral or ethical dependence of the capacity to conceive or project great things, upon the capacity to be or to do them. It is as true as any law of hydraulics or statics, that the workmanship of a man can never rise above the level of his character. He can never adequately say or do anything greater than he himself is. There is no such thing, for instance, as deep insight into the mystery of Creation, without integrity and simplicity of character." And De Quincey affirms:

“ Besides its relation to suffering and enjoyment, genius always implies a deeper relation to virtue and vice.”

Diametrically opposed to the foregoing is the view that next follows. It is a passage from Lowell's essay on Rousseau. He says: “ Genius is not a question of character. It may be sordid, like the lamp of Aladdin, in its externals; what care we, while the touch of it builds palaces for us, makes us rich as only men in dream-land are rich, and lords to the utmost bound of imagination? So, when people talk of the ungrateful way in which the world treats its geniuses, they speak unwisely. There is no work of genius which has not been the delight of mankind, no word of genius to which the human heart and soul have not, sooner or later, responded. But the man whom the genius takes possession of for its pen, for its trowel, for its pencil, for its chisel, *him* the world treats according to his deserts.”

CHAPTER V.

COMMENTS' ON FOREGOING DEFINITIONS OF GENIUS.

Each View Partly Right, None Wholly So.—The Common Element in All.—Genius is Uncommonness of Intellectual Endowment in the Ascending Scale.

In reviewing the various definitions of genius just presented, we are very forcibly reminded of the old story of the chameleon. Each beholder viewing the reptile under different circumstances or moods, concludes it is of an entirely different color from that reported by any other beholder; the truth being, of course, that each is partly right, and none wholly so. Again: if we sum up the definitions of genius presented, we shall find them to be nine in number, which corresponds exactly to the number of leading evangelical denominations in Christendom. Each of these sects views Christianity from a slightly different stand-point from all the others, and hence truthfully apprehends a certain genu-

ine phase or tint of it which escapes the perception of all the rest; but it can not be claimed that unto any one of them has been revealed the whole spectrum of the gospel of Christ.

Just so, we take it, as regards the foregoing definitions of genius: each is true, but not the whole truth; and genius, when fully apprehended, will be found to be compounded of the essence of each one of them. Let us briefly criticise each of these definitions.

It is unquestionably true that there can be no genius where there is no originality. This, properly conceived, is a very comprehensive quality of mind. It involves not only the power to perceive things first, but also the faculty for discovering new phases or relations of those same things, or of other familiar ones. Franklin was a real discoverer when he drew lightning from the clouds; but not any more original in mind than Voltai, or Morse, or Locke, or Edison, or any other of the numerous inventors who have, since his day, successfully applied that same fiery fluid to scientific and mechanical ends. The

degree of originality which may be claimed for the Darwins, for Kant, Laplace, and Lamarck, as expositors of the great physical law of evolution, is but little, if any, superior to that which belongs to Spencer, who assumes to have demonstrated the prevalence of the same law in the structure of the various governmental, social, moral, and religious institutions of mankind.

We confess our inability to see any real difference between originality and anticipation, as definitions of genius. To anticipate a thing is simply to see it, or know about it, or to do it, before any other person has such knowledge or performs such action. But what is this, if not originality—the being first on a scene, the being first in utterance, the being first in exploit? Can one conceive of an original thought, or expression, or action that must not have anticipated every other similar thought, or expression, or action? To recur to the illustration of anticipation given by Macaulay and Alison, the beholder on the mountain-top, as compared with his fellow in the valley, anticipates the

rising of the sun in no other sense than that he is the first or original spectator of it, and *vice versa*. The two terms, then, originality and anticipation, strike us as being simply synonymous—mere interchangeables.

And, is either of them entirely satisfactory as a definition of genius? What we have already observed with regard to originality may be applied with equal propriety to anticipation—namely, that it is an essential factor of every genius. But is either originality or anticipation genius itself? May we not conceive of them as existing in an individual—nay, can we not cite individuals in whom they have existed, for whom it can not be claimed that they were geniuses? We think so. There is another element which must enter into this originality or anticipation in order to constitute it real genius, and that is the element of size. In other words, the originality must be pronounced, intense, surprising, in order to win for itself the distinction of being classed as genius. Each person is, in one or more points, different from his fellows. This, however, is only

individuality, or idiosyncrasy—a vulgar and insignificant thing indeed, compared with genius. It is only when this individual endowment displays a largeness or an intensity that is surpassing, that we are willing to recognize it as akin to genius, if not genius itself.

Is genius breadth? Yes, if it be a phenomenally broad and not shallow breadth. And genius of this type is, we apprehend, the rarest of all. Just as in every army there are thousands of privates, hundreds of captains, and scores of brigade and division commanders for every general-in-chief, so in the divers bodies of intellectual workers there are multitudes of efficient specialists, not a few of whom may also be allowed to be geniuses, for every Plato, or Bacon, or Shakespeare, or Alexander Hamilton—men whose cosmic cast of mind enables them to comprehend, harmonize, and unify whole systems of seemingly conflicting interests. Such men have nothing to do with details; they are not absorbingly interested in any one department of thought, but, ranging

over all activities with impartiality and familiarity, and gathering into hand the essential threads of each, they therefrom weave the large and enduring patterns of family, state, religion, philosophy, and literature. Laws and principles are the materials with which they deal, and systems are their fabrics. However intrinsically interesting and important a single thing, they value it chiefly, if not solely, for its relative worth and influence. They apprehend things, not as integers, but as factors; and men, not as individuals, but as communities. It is the entire landscape that they sweep at a glance, and not a single feature of it—the whole, rather than any part. They are the architects of every grand enterprise, and not its artisans—the modelers of complete statues, and not the expert chisellers of parts.

Very closely related to, if not identical with, breadth, is the constructiveness defined as genius—the power to combine, to synthesize, the results of others' labors, after a fashion extraordinarily novel or large. For is it not plain that, before there can be any intel-

ligent combination or construction, there must first be formed in the mind the scheme, or design, in conformity with which the arrangement of materials must proceed? And is it not farther apparent that, in order that such scheme or design may lay any claim to being a work of genius, it must discover either a superior newness or an unusual largeness? The very idea of being a constructor presupposes the power to grasp and manipulate constituent parts; and the greater the number of these parts, the ampler must be the hand or the eye that would direct their organization. The putter-together of a mosaic must possess a breadth of view equal to the combined areas of vision of each maker of a bit of the composite, and the planner of a military campaign must be able to focalize in himself the movements of entire divisions of troops as if they were single companies or files. This is constructiveness, but it is no less breadth; and either manifested in an extraordinary degree is genius.

Is concentration genius? In no sense whatever. The most remarkable exhibition to be

had of concentration of mind is in the case of monomaniacs; and we know of no genius who was such by virtue of any mania he may have contracted. At the same time, we believe there can be no genius without concentration of mind; but concentration is simply one of the many conditions of genius, and not the thing itself.

The same may be said of patience. Indispensable as it undoubtedly is for bringing all the fruits of genius to maturity, it can not cause a single stalk of genius to spring up, or a single bud, leaf, or fruit of that rare plant to grow, unless there first be, at the root of the whole, the genuine *seed* of genius. Patience may be allowed to be the atmosphere of genius; but it is quite as surely the atmosphere also of mediocrity, and even of inferiority; the essential difference between the three inhering exclusively in their respective germs.

Then as to genius being "common sense working at a high level," why, the very phrase is a flat contradiction of terms. *Common* sense and a *high* level—you might as

well associate common stock and a rare breed, or common coal and a diamond. Common sense, when it rises above the common level, ceases to be common sense, and becomes uncommon sense—the level in this case making as much difference in the thing itself as it does in the case of the atmosphere, or water, or fauna, or flora.

But may it not be possible that we are misinterpreting the term common sense? Let us see. Take all the synonyms of common furnished by the standard dictionary, and put each in turn in place of the word itself, in the compound under consideration, and see if there is any meaning emitted different from the one already attributed. Here is the list: General sense, public sense, popular sense, national sense, universal sense, frequent sense, ordinary sense, customary sense, usual sense, familiar sense, habitual sense, vulgar sense, mean sense, trite sense, stale sense, threadbare sense, commonplace sense. Does any one of these qualifiers show that the sense considered is other than that possessed by a large number—nay, the

great mass of mankind? Certainly not. Then, such being the case, common sense can not by any possibility rise above the normal level of those who possess it—the mass. The sense which *does* so rise and attain to a high level, is in no element of its nature common, but, on the contrary, is essentially and completely uncommon, or extraordinary. Were common sense, according to the literal signification of the term, genius, then unquestionably would the latter be a much more generally diffused endowment than anyone has heretofore supposed, or existing evidences would warrant us in believing it to be.

Is it not possible, however, that by common sense our definer would have us to understand a knowledge of human nature? for such it is not unfrequently understood to mean. In this event, we should feel very much inclined to accept his definition; for anything approaching a clear and full insight into human nature is an individual gift of so rare an occurrence, that he who possesses it may well be reckoned a genius. But if this

be our definer's meaning, what a flagrant misnomer of genius is common sense!

Again: Is genius character? In the definitions presented, we have both an affirmative and a negative reply. We think the latter much the more tenable of the two. A single well-defined illustration of the truth that intellectual greatness can co-exist with moral littleness, is proof conclusive that genius and character are not necessarily correlatives. But such illustrations are numerous; indeed, we fear it would not be impossible to show that a large majority of the most eminent geniuses of the world have been men whose lives proved an unworthy setting to their brilliant gems of mind. And what is saddest about the matter is, that this want of accord between mental endowment and moral integrity seems to obtain particularly in those geniuses whose special mission it is to preside over and inspire the sentiments and to inform the æsthetical tastes of mankind—the poets, the musicians, and the artists of the human race. It must, therefore, be conceded that it is possible for the human mind

to entertain the justest, purest, sweetest, and most exalted conceptions of art and of conduct, and also to give them the most fitting and captivating expression, at the same time that the heart is quite indifferent to their noble influence, and the life quite devoid of their divine companionship. There is nothing necessarily incompatible between genius and rectitude; but it is quite as true that either of these may exist in an individual wholly independent of the other. There can be no question but that the giant mind and the saintly heart mutually befit and aggrandize each other, and that when found united in the same person, they exalt him to the topmost station of human attainment; but quite as sure is it that, in the cases of a majority of the world's greatest geniuses, no such felicitous conjunction has existed. The most gigantic and gorgeous of flowers—the *Rafflesia Arnoldi*—has the odor of putrid meat.

Lastly: Is genius madness? As has already been shown, extraordinary gifts of mind have frequently been associated with one or

other form of mental or nervous derangement; but this, in our opinion, no more proves that the two are identical, or that they are necessarily concomitants, than does the presence of the worm in the bark of the *gigantea sequoia* prove that the monarch of the Californian forest and its contemptible parasite are one and the same thing. If it were indeed true that madness and genius are identical, then might we expect to find the greatest living geniuses within the walls of lunatic asylums. If genius and madness are of one substance, then must it follow that the greater the madness, the greater the genius, and the reverse. A man may become mad by reason of the too great pressure of his mind upon some weak part of his physical organism, but all the concentrated madness of the race, or any choice part of it, could never generate a genius. Madness is simply an occasional, an incidental attendant of genius, and is no more genius than is the grotesque shadow of an object the object itself. Madness is one of the many manifestations that genius presents — an

ugly one, no doubt—and is no more the whole of genius than is a single cat-call the varied carol of the mocking-bird. Madness is a lapse or interregnum of genius, and is as distinct from it as is the incidental stumble of a horse from his habitual gait. If madness be indissolubly conjoined with genius, it is only as nethermost antipode or hindmost extreme; and if the two rule jointly, then madness enacts the infernal demon to the supernal divinity of genius.

But, as we have already shown in our quotation from Doctor Stevenson's reply to Mr. Sully, the various manifestations of madness are, first, attendants not only of genius, but also of every lesser degree of mental endowment; and, secondly, they are a more frequent accompaniment of inferior orders of intellect than of superior ones—the two facts proving conclusively that there is no natural or necessary connection between genius and any species of mental unsoundness.

CONCLUSION.

However unlike or antagonistic the foregoing definitions of genius may be, or may seem

to be, no great shrewdness is required to detect a common element running through all—and that is the element of *uncommonness*.

Originality, or its equivalent anticipation, can not claim to be genius, unless it exist upon an uncommonly large scale. Breadth may be genius only as it is extraordinarily generous, conspicuously comprehensive. And concentration or constructiveness, if they would escape the suspicion of being mere talents, must take on either an unusual intensity or an astonishing range. We see, then, that uncommonness is the one necessary quality which enters into every conception of genius. What objection, then, can there be to the selection of this quality as the most expressive definition of genius itself, seeing it is ample enough to embrace any or all of the definitions presented, and that it is the one element in each which refuses to disappear under analysis?

As the outcome, then, of our inquiry into the real meaning of genius, we would venture to assert that it is uncommonness of

intellectual endowment, whether as regards either the kind or the scope of its activity. Uncommonness of endowment in kind originates the specialist, while uncommonness of endowment in scope originates the generalizer or philosopher—and both, by virtue of their uncommonness, and by virtue of that alone, are geniuses. Of course, this uncommonness must be manifested in the ascending and not the descending scale of human endowments.

CHAPTER VI.

PRECOCITY.

Is Genius Characterized by Precocity? The Affirmative View Supported by Seventy-four Eminent Examples.—The Negative View Favored by about Fifty Equally Weighty Examples.—Tabular Exhibit of the Merits of the Question, Derived from Investigation of the Lives of Three Hundred of the Foremost Geniuses of the World.—Conclusion.

Just as a day of memorable beauty is, as a rule, heralded to the world by a lightsome-visaged and blushing-cheeked aurora, so are we prone to think the advent of a genius must be prophesied to mankind in the dazzling parts of some child. And as fabled Apollo, soon as he had tasted of the Olympian nectar and ambrosia, shook off his swaddling-bands, and, seizing a lyre, declared himself ready for his divine mission, so would we have genius exhibit its preternatural characteristics close upon the heels of infancy.

Of course, it is not believed that every child manifesting precocious traits will certainly develop into a genius; nevertheless

are we wont to make it hold good that geniuses almost universally bud forth in children of transcendent brilliance.

And here are some data that undoubtedly warrant this view:

Aristophanes, the great comic poet of Greece, gained his first prize at nineteen years of age. Cowley received the applause of the great at eleven, Pope at twelve, and Milton at sixteen. Byron's general information as a boy was unusually large and varied, and the list of works, in divers departments of literature, which he had perused before his fifteenth year, is something astonishing. His first known poetical effusion was penned at twelve, and at eighteen he published his first volume of poems. Burns was a poet at sixteen, his first recorded poem having been written in memory of a fair girl companion of the harvest-field, from whose hands he was wont to remove the nettle-stings and thistles. Henry Kirke White was but seventeen when his first volume of poems was given to the public; Schiller published a poem on Moses when only fourteen; Klop-

stock began his "Messiah" at seventeen; at eighteen Tasso wrote "Rinaldo;" Calderon, the famous Spanish dramatist, penned his first play at fourteen; Goethe composed dialogues when only six or seven; Alfred de Muset wrote poems at fourteen; Victor Hugo, called the "enfant sublime," versified when a school-boy, and at sixteen produced work of permanent value; Beaumont composed tragedies at twelve; Coleridge revealed his poetic genius at sixteen; Mrs. Browning began writing poetry at eight, and produced an epic at twelve; and Mrs. Hemans published a volume of poems at fourteen.

Leonardo Da Vinci, the most comprehensive and versatile of all the great Italian masters of art, when but a small boy, puzzled his teachers by his original remarks and searching inquiries. In his first effort at drawing he surpassed in grace and naturalness of outline the models of his experienced instructor. When Michael Angelo was placed at a grammar school, preparatory to his entering on one of the learned professions, he spent his time chiefly in drawing,

much to his father's disgust. Apprenticed to an eminent artist, his progress was so rapid as to excite the latter's jealousy, and to compel the confession that his pupil had no farther need of him. Raphael, before he was sixteen, copied the illustrious Perugino's designs so perfectly, that his copies were frequently mistaken for the originals; indeed, some pronounced them superior in the moral earnestness and ecstatic vision with which he imbued them. Giotto, the earliest of the artist giants of mediæval Italy, took his first lessons directly from nature, when a shepherd lad, attending his father's flock. Murillo displayed artistic talent when a mere child, covering the walls of his house with drawings, and painting pictures which he sold at a neighboring fair. Canova carved a lion with astonishing fidelity at twelve, and Thorwaldsen at eleven had engaged in a systematic study of art. Landseer could draw well at five, and admirably at eight. Gainsborough became a painter at twelve, and Turner exhibited creditable work at fifteen. Sir Christopher Wren at the age

of thirteen had invented an astronomical apparatus, a pneumatic engine, and several curious if not useful instruments.

At the age of nine years, Handel composed motets and other pieces which were sung in the cathedral; and when only two years older, he provoked the mingled applause and envy of the foremost composer and organist of Berlin by his astonishing instrumentation. When but a choir-boy at St. Stephen's, Haydn composed a mass, and he was only twenty years old when he wrote his first opera.

Mozart, when barely able to reach up to the key-board of the piano, would pick out thirds and other chords while his older sister was taking her lesson, and began taking lessons himself when only four years old. At this early age, too, he began to compose, and when six actually wrote a concerto for the clavier. The next two years he spent, in company with his father and sister, visiting the royal families at Vienna, Paris, Versailles, London, and Holland, and exhibiting before them and the best musicians of

Europe his marvelous skill, both as performer upon and composer for the clavier, the violin, and more especially the organ. At nine he wrote six sonatas for violin, viola, cello, horn, oboe, bassoon, and harpsichord, and also a small oratorio; and at twelve, in presence of the whole imperial family of Austria, he wielded the conductor's baton at the performance of a mass composed by himself for the consecration of a new church.

Herr Neefe, a distinguished musician of his day, wrote of Beethoven when he was but eleven years of age: "He plays the piano with wonderful execution, and reads very well at sight—in short, he plays almost the whole of Sebastian Bach's 'Wohltemperete Clavier.' " When, at seventeen years of age, he extemporized upon a theme just then laid before him, Mozart ecstatically exclaimed to the assembled critics: "Take care of this youth; some day he will make a stir in the world." Weber was still in his teens when he wrote two comic operas, and was only eighteen when he was made con-

ductor of the Breslau Opera House. Rossini began to compose as early as sixteen, and wrote his celebrated opera "Tancredi" when he was scarcely twenty-one. When only seven years of age, Schubert, without having had any formal instruction, played surprisingly well upon the harpsichord, and between his eleventh and sixteenth years, while serving as a choir-boy, composed a symphony in D major, a cantata, a part of an opera, several string quartets and fantasias, an octet for wind instruments, and quite a number of songs—among them, the well-known "Hagar's Lament." Mendelssohn, before he was ten years of age, had gone through a complete course of musical instruction. When only twelve, he had composed his first symphony, that in C minor, and two or three one-act operas; and about the same time, when attending a meeting of the Cecilia Society at Frankfort, he extemporized upon one of Bach's motets in such a manner as to thrill with wonder and admiration the experienced musicians there assembled.

Galileo manifested his scientific bias while still a youth. Sir Isaac Newton had not yet entered his teens when he had exhibited extraordinary skill as a mechanical inventor—his windmill, water-clock, and flying kites being well-known illustrations of his natural deftness. James Watt, it is said, was only six years old when he was caught solving a geometrical problem upon the hearth with a piece of chalk; at fourteen he constructed an electrical machine; and he was still a lad when he made his first discoveries with reference to steam. At four years of age Cuvier could read fluently; at six was an interested inquirer into physical phenomena; at thirteen had read and all but memorized Buffon, copying all the plates in water-colors, and at twenty-six was a professor. Laplace was a mathematical teacher when still a boy; Lagrange was a professor at eighteen; St. Hilaire at twenty-one; Kepler, Linnæus, and Davy at twenty-three; Copernicus at twenty-seven, and Tycho Brahe at twenty-eight. Leibnitz received his degree of M. A. at fifteen, and that of LL. D. at

nineteen. Abelard astonished Paris, and, indeed, all Europe, with his dialectics at twenty. Berkeley arrived at his notion of idealism when a youth of eighteen at college, and enunciated his "New Theory of Vision" at twenty-four. Schelling had written three philosophical works before he was twenty.

Charles Dickens, when but a small boy, became famous among his playmates as the writer of a tragedy called "Misnar," and also as the relater of impromptu stories. Guizot, the eminent French statesman and historian, has been called "a child who had no childhood." At eleven he could read in the originals the works of Thucydides, Demosthenes, Cicero, Tacitus, Dante, Alfieri, Schiller, Goethe, Gibbon, and Shakespeare. And at the same early period his mind was particularly fond of and devoted to historical and philosophical subjects. Grotius wrote good Latin verses at nine, and at seventeen did work of a high scholarly character. Porson at nine could extract the cube root of a number mentally, and at

fifteen could repeat the whole of Horace, Virgil, and many parts of other classical authors. Macaulay indicated his historical bias at eight, at which time also he had written a romance and several poems. Thirlwall was taught Latin at three, and could read Greek at four with great fluency.

Hannibal as a boy accompanied his illustrious father in his military expeditions to Spain, and after the latter's death, though still very young, won the admiration of the army by his extraordinary courage and skill. Napoleon Bonaparte evinced his love for military affairs at a very early age, and the unusual aptitude he exhibited at the military school at Brienne elicited from one of his professors the remark, "Keep an eye on young Bonaparte, and promote him as fast as possible, for if you do not, he will make a way for himself." Scipio had achieved his highest distinction before he was thirty. At the same age Charlemagne was master of Germany and France. Joan of Arc was but eighteen when she had attained the name of, in some respects, the

most marvelous conqueror the world has ever seen. In boyhood Alexander the Great manifested extraordinary physical prowess in training Bucephalus; at sixteen he was entrusted with the regency of Macedonia during his father's temporary absence; at eighteen he defeated the Theban Sacred Band at Chæroneia; and was only twenty when, upon Philip's death, he assumed the head of government, and inaugurated his career as the greatest of conquerors. Peter the Great triumphed over the combined factions of his older brother and sister, and became sole Czar of Muscovy, at seventeen.

Did space permit, or the necessities of the case warrant them, the biographies of such illustrious men as Archimedes, Sir David Brewster, Julius Cæsar, Nelson, Bossuet, Rembrandt, Salvator Rosa, Albert Durer, Correggio, Guido, Shelley, Keats, and many others might be made to yield additional data in confirmation of the apparent rule that the normal blossom of genius is precocity.

But against this rule, if such it be allowed

to be, there may be arrayed a very formidable number of significant exceptions—geniuses whose consummate flower appeared—as in the case of the century-plant—just before, and in some instances would seem to have been indicative of, their dissolution. We shall cite a few of them.

The world-renowned Cervantes, though furnished with the education usual to gentlemen of his time, developed no special brilliance as a student, and was fifty-eight years of age when the first part of *Don Quixote* was given to the public. Bunyan gave the world no evidence whatever of possessing a unique faculty before he had produced "*Pilgrim's Progress*," at which time he was probably forty years of age. Virgil was already thirty years old when his first poetic work of any value appeared—the "*Bucolics*;" while his *Æneid* was written between his forty-third and fiftieth years. *Æschylus*, the founder of the drama, won his first prize at forty-one. Euripides, the tragic Greek poet, achieved a like distinction at thirty-nine. Dante was thirty-five

when he began the composition of his "Divina Commedia." One of the pioneers of French poetry, Peter Rusard, did not discover his poetic faculty much before his fiftieth year. Chaucer's most meritorious as well as most famous poems, the "Canterbury Tales," were the product of his old age. Wordsworth did not attain renown until after forty.

In the thirty-two years that preceded the advent of the first successful American novel, its author, James Fenimore Cooper, was one of the obscurest and seemingly most commonplace of American citizens. Charlotte Brontë and her sister, though they began writing letters, stories, and plays at a very early age, yet did not produce anything noteworthy until they were about thirty. Fielding was forty-three when he wrote "Tom Jones," and Sterne was forty-six when "Tristram Shandy" appeared. Had Shakespeare died at thirty, Bacon at thirty-five, Spencer at thirty-seven, "George Eliot" at thirty-eight, Addison, Dryden, and Gibbon at forty, Hallam at forty-one, Scott and

Hume at forty-three, Butler, Richardson, and Cowper at fifty, Grote at fifty-two, Locke and De Foe at fifty-eight, and Milton at sixty, it is doubtful if even a very complete history of English literature would have favored them with so much as the briefest mention.

Bach did not compose until after forty, while Haydn did not develop his peculiar merits as a composer till near sixty years of age. Sir Christopher Wren did not betray his qualities as an architect until about thirty. At the earliest mention of the art of printing, Gutenberg was about forty years old. Columbus was fifty-six when he planted the Spanish flag on San Salvador. Franklin was forty when he began his investigations in electricity, and Stephenson was thirty-two when he constructed the first locomotive steam-engine. Harvey published his great discovery at fifty, and Darwin his "Descent of Man" at the same age. Descartes, Hobbes, and Leibnitz did not achieve philosophical distinction until after fifty, and Kant at forty-six. Niebuhr's first volume

was published at thirty-nine, Thirlwall's at thirty-eight, and Grote's at fifty-two. Had Cromwell died at forty-three, England would, in all probability, have missed one of the most glorious epochs of her whole history—the Commonwealth.

A recent writer in the "Nineteenth Century," Mr. James Sully, has given the subject of "Precocity" as related to genius a very full and able consideration, and we know of no more appropriate or effective means of concluding the present chapter than by transferring to these pages his tabulated summary. Mr. Sully has based his observations and generalizations upon the recorded lives of between two hundred and fifty and three hundred of the most eminent of men in all the various departments of intellectual pursuits—men whom we would unhesitatingly call geniuses. Of these, the numbers showing distinct promise before twenty, in the several classes, are represented by the following fractions:

Musicians.....	nineteen-twentieths.
Artists.	eight-ninths.
Scholars	five-sixths.

Poets.....	three-fourths.
Novelists	three fourths.
Scientists	three-fourths.
Philosophers	two-thirds.

Assuming work before the age of thirty years as representing early production, the proportions in the different groups are about as follows:

Musicians	all.
Artists.....	forty-one-forty-seconds.
Poets....	eleven-twelfths.
Scientists	four-fifths.
Scholars.....	five-sevenths.
Philosophers.....	five-ninths.
Novelists....	nine-sixteenths.

As regards the age of distinction, the following proportions attained it before forty:

Musicians	all.
Artists	all.
Poets	eleven-twelfths.
Scientists.....	eleven-twelfths.
Scholars	nine-tenths.
Novelists.....	four-fifths.
Philosophers.....	three-fifths.

Mr. Sully's concluding remark respecting the foregoing data is as follows: "We note that the order in respect of precocity answers roughly to the degree of abstractness of the faculty employed. At the one extreme, musicians and artists represent sensuous faculty, or the least abstract mode of mental

activity; while philosophers, at the other extreme, illustrate the highest degree of abstraction. Between these come the men of imagination, the poets and novelists. And this is the very order we should antecedently expect from a consideration of the general laws of intellectual development; for sense, imagination, and abstract thought are the three well-marked stages of intellectual progress."

Finally, if we strike an average of the fractional proportions presented in each of the above tables, we shall find that, of the nearly three hundred geniuses considered, about five-sixths of the entire number exhibited extraordinary promise before twenty years of age; eleven-fourteenths of them produced characteristic work before thirty; and eight-tenths of them achieved distinction before forty. Assuredly, with this overwhelming preponderance of evidence in its favor, it can no longer be questioned that extraordinary earliness of development and production—or, in a word, precocity—is a usual, if not an invariable, accompaniment of genius.

The reason why this is not more universally manifest than it is, is probably due to the obscurity and poverty that have beset the early years of so many gifted men. Had the infancy and youth of all geniuses been passed alike amid appreciative, fostering, and tale-bearing environments, it is not at all improbable that the remarkable evidences of precocity recorded of the large majority of them would be equally patent of all the remainder.

CHAPTER VII.

GENIUS AND LABOR.

Do the Creations of Genius Involve Labor?—Affirmative View Favored by Longfellow, Ruskin, Carlyle, Thomas Moore, James Sully, Tacitus, Hogarth, Charles Sumner, Buffon.—Examples of the Foregoing View.—Contrary Opinions of Emerson and Carlyle.—Examples in Support of Latter View.—The Amount of Labor Dependent Upon the Nature of the Sphere of the Genius.—With all Geniuses Original Ideas or Conceptions are Spontaneous, or Nearly so; Conscious Labor being Necessary Chiefly for Giving Material Expression to those Conceptions.

Two very widely different views have been held as regards the degree of mental labor involved in the production of the works of genius. Some have claimed that genius proceeds with a step as slow and labored as it is sure and irresistible; while, on the contrary, others have held that one of the most essential characteristics of genius is that it accomplishes its ends with phenomenal rapidity and ease.

We shall hear the advocates of these two separate views in the order just indicated.

Longfellow, in his "Ladder of St. Augustine," affirms:

"The heights by great men reached and kept
Were not attained by sudden flight,
But they, while their companions slept,
Were toiling upward in the night."

In his essay on "The True and Beautiful," Ruskin remarks: "The fact is, that a man of genius is always far more ready to work than other people, and is often so little conscious of the inherent divinity in himself, that he is very apt to ascribe all his capacity to his work. Genius in the arts must commonly be more self-conscious, but in whatever field, it will always be distinguished by its perpetual, steady, well-directed, happy, and faithful labor in accumulating and disciplining its powers, as well as by its gigantic, incommunicable facility in exercising them."

Carlyle, in writing of Scott, says: "Great writers do not write rapidly and easily."

"Nothing great and durable," observes Tom Moore, "has ever been produced with ease. Labor is the parent of all the lasting

monuments of this world, whether in verse or in stone, in poetry or in pyramids.”

“All fine original work,” says James Sully, in his admirable article on Genius and Insanity, “it may be safely said, represents severe intellectual labor on the part of the producer, not necessarily at the moment of achievement, but at least in a preparatory collection and partial elaboration of material.”

“*Meditatio et labor*,” according to Tacitus, are the only passports to literary immortality.

“I know no such thing as genius,” says Hogarth. “Genius is nothing but labor and diligence.” “Who shall say,” queries Charles Sumner, “that the power to work is not itself genius?” And Buffon meant about the same thing when he said, “Genius is only great patience.”

Of the almost innumerable instances that may be cited in proof of the above opinions, we shall present the following :

It is said to have taken Virgil three years to compose his ten short Eclogues, seven

years to write his *Georgics*, and twelve years to elaborate the *Æneid*. The last he was several times tempted to destroy because of its fancied incompleteness. Lucretius' single poem was the work of a life-time. It took Thucydides twenty years to write a work comprised in an octavo volume. Diodorus was thirty years in composing his history. Isocrates is said to have consumed ten years on his *Panegyric*, and Giannone nearly the same time on his "*History of Naples*."

Locke spent eighteen years upon his "*Essay on the Human Understanding*." The great French artist, Claude Lorraine, painted slowly and with great labor. Greece's master painter of ancient times apologized for his slow work by saying, "It is because I work for immortality." Gray, though he may not be allowed to belong to the gallery of the poetical geniuses of the world, yet wrought one of the comparatively few poems that mankind can not afford to forget. The "*Elegy Written in a Country Church-yard*" was twenty years in passing through its evolutionary processes.

The unique, if not the greatest, of German romances, "Titan," constituted the main literary output of ten of the most virile years of Richter's life. The greater part of the ripest seventeen years of his life Gibbon expended upon his "History of the Decline and Fall of the Roman Empire." Grote spent ten years upon his "History of Greece." Adam Clarke consumed twenty-six years on his "Commentary." Carlyle devoted fifteen years to the writing of his "Frederick the Great." "George Eliot" read one thousand books preparatory to the writing of "Daniel Deronda." Alison read two thousand books while preparing his history. It is said that Buckle gave his life to reading history; that he read forty thousand volumes, and wrote only two.

The sparkle and flow of Lamb's essays, seemingly so spontaneous, were the rewards of the most scrupulous painstaking upon the part of their author. Days were consumed in fashioning a single letter to a friend, and he was never done with emending a proof-sheet. Tennyson is known to have rewritten

several of his most highly admired poems a score or more of times before submitting them to the printer. Balzac, the great French novelist, would rewrite his manuscripts a half-dozen or more times before sending them to press, and the proofs returned were subjected to no end of alteration. The artistic perfection and melodic rhythm of Longfellow's poetry, so suggestive of a natural and easy origin, are, on the contrary, the fruits of very careful study and devoted labor.

Moore, the most transparent and musical of poets, thought fifteen or twenty lines a good day's work. Buffon spent fifty years upon his "Studies of Nature." Wordsworth was in the habit of putting aside his first casting of a poem for weeks or months; then taking it up, he would bestow as much labor upon it as at first, if not more, before finally parting with it to the public. Horace was of opinion that a writer should withhold his work from the public eye for nine years after its first execution. Tasso's manuscripts can hardly be deciphered, be-

cause of their numerous erasures and interlineations.

Pope says of Addison, that model of correctness and perspicacity of style, that "he would show his verses to several friends, and would alter nearly everything that any of them hinted was wrong." And Pope himself usually gave his productions a year's sweating before committing them to print.

"It is a very great error," says Mozart, "to suppose that my art has been easily acquired. I assure you that there is scarcely anyone that has so worked at the study of composition as I have. You could hardly mention any former composer whose writings I have not diligently and repeatedly studied throughout."

The author of "Hudibras" kept a common-place book, in which he very industriously penned such remarks, similitudes, allusions, and inferences as his reading or thought suggested, and his immortal burlesque was the product of years of such preparatory studies and premeditation. Goldsmith regarded four lines a day as good

work, and was seven years in constructing his "Deserted Village."

Giotto, one of the most comprehensive geniuses that art has ever known, was quite as extraordinary for the amount and the difficult character of the work he executed, as for the surpassing excellence of its quality. Leonardo Da Vinci, the most versatile of all geniuses, was yet one of the most fastidious and indefatigable of workers. In preparing for his world-famous cartoon, "The Struggle for the Standard," he subjected himself to months of study in the dissecting-room, and actually wrote an original and exhaustive treatise on the anatomy of the horse, before permitting his hands to touch the clay for modeling his work. Michael Angelo was scrupulously conscientious even as to the smallest technical details; preparing his own grounds, mixing his own colors, and inventing and constructing, with his own hands, the tools with which he wrought his matchless sculptures. Meissonier spent the best part of his time for fifteen years upon his great picture, "1807."

Haydn, after he had fairly begun his career as a music student, and when still a youth, declared that thereafter he did not recollect to have passed a single day without practicing sixteen hours, and sometimes eighteen. And when at his maturity, he spent two years in composing the colossal oratorio of the "Creation." Beethoven became so absorbed in his composition of the mass in D major, that he did not finish it until two years after the event had passed by which it was designed to celebrate.

And now let us regard some of the testimony and facts that lie upon the reverse side of this question:

Emerson, in "Representative Men," declares: "I count him a great man who inhabits a higher sphere of thought, into which other men rise with labor and difficulty; he has but to open his eyes to see things in a true light, and in large relations; whilst they must make painful corrections, and keep a vigorous eye on many sources of error."

Having already quoted Carlyle on the affirmative side of the present issue, we shall equalize matters by now citing him on the negative side. He says: "No great intellectual thing was ever done by great effort; a great thing can only be done by a great man, and he does it without effort."

As confirmatory of the opinion just noted, the following instances, which might be indefinitely multiplied, if it were necessary, will probably suffice:

Plutarch said of Cicero: "It was not by slow and insensible degrees that he gained the palm of eloquence; his fame shot forth at once, and he was distinguished above all the orators of Rome." It is reported that Lucilius could turn off two hundred verses while standing on one leg. Query: Could it have been a *wooden* leg? And did the verses turned off resemble their pivot? Dryden produced four of his greatest works in a single year, the original draught of "Alexander's Feast" having been struck off at a single sitting. "Rasselas" was written by Johnson in a week, the "Life of Savage"

in thirty-six hours, and his "Hermit of Teneriffe" in a single night. Mrs. Browning's "Lady Geraldine's Courtship" was completed in twelve hours—presumably a shorter time than the lady herself would have consented to. Ben Jonson wrote the "Alchymist" in six weeks. "Telemaque" was written by Fenelon in three months. A day or two sufficed for Lope de Vega to write a play in; a farce was the sport of an hour; and he left to posterity two thousand original dramas. Is it not probable that posterity will require about two thousand years for digesting the generous Spaniard's bequest?

Speaking of the facility with which Sir Walter Scott composed, Robert Hogg, his copyist and amanuensis for some time, declares: "He sat in his chair, from which he arose now and then, took a volume from the book-case, consulted it, and returned it to the shelf, all without intermission in the current of ideas, which continued to be delivered with no less readiness than if his mind had been wholly occupied with the words he

was uttering. It soon became apparent to me that he was carrying on two distinct trains of thought, one of which was already arranged, and was in the act of being spoken, while at the same time he was in the advance considering what was afterward to be said." He was engaged, at the time of his great financial misfortune, in writing the "Life of Bonaparte," and also his new novel, "Woodstock;" and, says his biographer, Lockhart, "Even on the day which brought him assurance of the great catastrophe, he resumed, in the afternoon, the task which had engaged him in the morning." Some idea of the rapidity with which he produced his fictions may be gained from the statement that, beginning with "Waverly," his works, during the next ensuing decade, were issued at the rate of a volume and a half a year.

In not a few instances, Dickens carried on two of his stories at a time, and for nearly thirty continuous years his annual average of production was almost a volume, and a large volume at that. "I had come," says

Goethe, "to regard the poetic talent dwelling in me entirely as nature; the rather that I was directed to look upon external nature as its proper subject. The exercise of this poetic gift might be stimulated and determined by occasion, but it flowed forth more joyfully and richly when it came involuntarily, or even against my will."

Byron was not a little vain of the facility with which he shot forth his compositions; and, by way of correcting the incredulity of certain hostile critics upon this point, prefixed to many of his poems a note of the exact time both of his commencing and his finishing them. Here are some of the most pertinent of these memoranda. In the introduction to his tragedy of "Sardanapalus," he says: "The three last acts were written since the 13th of May, 1821; that is to say, in a fortnight." Between June 11th and July 10th of the same year, his five-act tragedy, "The Two Foscari," was composed; and between December 18th of the same year and January 20, 1822, his tragedy of "Werner," also in five acts, was

written. The time actually consumed in composing the various cantos of "Don Juan" scarcely exceeded the average of a month for each. In one of his letters he says: "'Lara' I wrote while undressing, after coming home from balls and masquerades, in the year of revelry, 1814.'" The "Corsair," a tale of over two thousand lines, he wrote in thirteen days.

Robert Burns, the greatest of Scotland's poets, and certainly one of the most genuine sons of the Muse anywhere to be met with, was a notable incarnation of the spontaneity of the poetic afflatus. "Death and Doctor Hornbook" was written while its author was seated on a bridge, on his way home from attending a convivial meeting, and just before succumbing to its effects. His touching lines "To a Mouse" were composed upon his bed, during the night that followed his witnessing of the incidents that suggested them. The church wherein the incident took place, and the few moments necessary for the episode, constituted the time and the place of the composition of his sprightly poem,

“To a Louse.” “The Twa Dogs” was a waif of fancy, picked up while walking home. That vivid medley of the ludicrous and the awful, “Tam O’Shanter,” was a road-side conception. The sublime and pathetic song, “To Mary in Heaven,” came to our bard’s mind on the anniversary of his loved one’s death, while he lay upon the ground, with his eyes fixed upon the starry sky. Indeed, all of Burns’ effusions, with few exceptions, were inspirations of the moment—unpremeditated conceptions of his ever-alert poetic faculty, which, like the eggs of certain birds, were deposited in all manner of odd nooks—upon the walls of rooms, the window-panes of inns, the fly-leaves of books, the pages of albums; but which, in most instances, were flashed forth in impromptu sentiments or songs, direct from the battery of his fancy.

“Saul,” the first of Handel’s immortal oratorios, was composed between July 3d and September 27th of the year 1738. “Israel in Egypt,” with its twenty-eight colossal choruses, its four recitatives, and its three

duets, was composed within the incredible limit of twenty-seven days, while his masterpiece, the "Messiah," the foremost composition of its kind ever conceived, was executed in twenty-three days.

Mozart wrote his "Don Giovanni" in the brief space of a few weeks, the overture having been composed in two hours. His grandest symphonies—the E-flat major, G minor, and C major—were all produced within the narrow compass of six weeks. Some fifty compositions, including in their number the grand piano-forte concerto in B flat, the cantata named "Ave verum Corpus," and the opera of the "Magic Flute," were compressed within the last six months of his life. That most impressive prayer, in the oratorio of "Moses in Egypt," of the Israelites before and after the crossing of the Red Sea, was written by Rossini in his night-shirt, in eight or ten minutes. Of "Semiramide" he declares: "It is the only one of my operas that I was able to do a little at my ease; my contract gave me forty days, but I was not forty days in writing it."

Moreover, society, the foe with most of creative workers, was to him a friend and inspirer. Schubert poured forth his musical thoughts so spontaneously, and so inexhaustible seemed his resources of song, that Schumann once said of him, "In time he would probably have set the whole of German literature to music." Surely a noble tribute to the gigantic achievements of one who died at thirty-one years of age—the youngest of all the world's great tone poets!

However many more opinions, each fortified with appropriate examples, we might adduce, we are satisfied that, like those already presented, they would simply range themselves on one side or the other of the question before us, in about equal force, and thus maintain the present equilibrium of evidence. And so, on the one hand, we find a large number of unquestionable geniuses, whom Atlas, exerting his gigantic strength to its utmost to uphold the world, may fitly symbolize; while, on the other hand, we meet with an equally large number of equally pure and great geniuses, whose mode of pro-

cedure is best typified by Phœbus Apollo riding forth in his chariot of the sun to daily supremacy with resplendent might and ease.

Of two persons, each of whom shall bring about equally admirable results, he who attains his end with the lesser effort is undoubtedly the abler man. It is the glory of Egyptian artisans of old, that they were able, by means of mechanical powers unknown to moderns, to lift into architectural position enormous masses of stone; but Orpheus, it is fabled, effected a like result by simply striking his lyre. The powers of the former, however phenomenal, were simply human, while those of the latter—presupposing their existence—could appertain to nothing short of the supernatural.

As to whether much or little labor is involved, depends, in no small measure, it would seem, upon the nature of the office to which the genius is summoned. Is it one that necessitates the discovery, the collection, the selection, and the arrangement of materials, whether of an objective or subjective nature? or does it demand the mastery

of numerous details and their systematized application in lines of original investigation? then, we apprehend that, however uncommonly endowed the individual may be, labor protracted and severe is the inevitable condition of success. But if, on the other hand, the genius be devoted to such creative pursuits as art, or music, or poetry, or fiction, there is reason for believing that, in many instances, he may sweep to his accomplishment with spontaneous and all but unconscious momentum. And of the two modes of manifestation, the latter—the creative—is undeniably the greater.

But while the foregoing theory may harmonize a majority of the apparent contradictions arising under the head of the relation of genius to mental effort, it utterly fails to explain why, among geniuses devoted to the least abstract and reason-exerting pursuits—to-wit: painters, poets, musicians, and fictionists—there is but little agreement in their several rates of mental production. For example: Among poets, Longfellow, Moore, Virgil, Gray, Tennyson, Wordsworth, Tasso,

Pope, Butler, and Goldsmith are named as slow producers, while Shakespeare, Dryden, Johnson, Mrs. Browning, Jonson, Lope de Vega, Scott, Goethe, Byron, and Burns are cited as rapid workers; of musicians, Haydn and Beethoven belonged to the first class, while Bach, Handel, Rossini, and Schubert fell under the second, Mozart seeming to fall alternately under each head; of artists, Giotto, Da Vinci, Angelo, and Claude Lorraine are classed as earning the bread of celebrity by the sweat of the brow, while Raphael, Correggio, Rembrandt, Reynolds, Turner, Vandyck's and Rubens won renown by single strokes of the brush; and of fictionists, Richter, "George Eliot," and Balzac wrought with greatest pains, while Scott, Dickens, and Goethe did their best work with the least cogitation.

May not a clearer understanding of these seemingly irreconcilable data be had—indeed, may we not secure a more satisfactory explanation of the whole puzzle of the extent to which genius lies under the yoke of mental toil—by keeping this well-known

truth full in view, namely: that every achievement involves two distinct elements—the idea, or the mental process of conception, and the giving objectivity to that idea? As between these two factors, the element of labor inheres mainly in the latter. Except where they depend upon a long series of inductions, as in the case of certain physical or social laws, all original ideas or conceptions are of instant and painless birth. They seem either to spring up spontaneously in the mind, or else to be flashed into it with lightning-like speed and thrill by suggestive surroundings or experiences. The consciousness of participation in their origin, and more especially the sense of effort in their production, are wholly absent from the mind. They are unexpectedly and unexpensively with us—guests after a new and ineffable fashion, whose whole history is best summed up in the very vague term—inspirations. These constitute the central thought of a poem, the theme of a musical composition, the motive of a picture or piece of sculpture, the plot of a story; and these,

though they are allowed to be the distinguishing characteristic, the crowning glory, of their several possessors—the poet, the musician, the painter, the sculptor, the fictionist—are the very things whose existence costs their owners the least degree of effort.

The explanation of the great differences that have arisen between geniuses in the amount of mental labor bestowed upon their several productions must, therefore, be sought for in the second of the factors which constitute every achievement—that of giving expression or external form to conceptions.

All ideas, however extraordinary their first estate, are susceptible of a greater or less degree of expansion and modification, and their interpretation to the public always necessitates some, and frequently much, elaboration. Such adaptive and developmental work, however, does not demand the same high order of intellectual equipment as is indispensable for great creative achievements. It is a subordinate grade of work, which partakes very largely of the mechanical, and which is mostly done in conformity

to well-known rules and well-worn routine—in a word, the proper material for the exercise of mere talents. And it is precisely in the performance of such, less than superior functions, that geniuses manifest their glaring differences of adaptability—differences which do not affect them as geniuses, but show their disparities simply in the line of their more or less commonplace faculties known as talents.

Our conclusion, then, of the whole subject of genius and its relation to mental effort, is this: that in all that pertains to the highest—the characteristic excellences of any work of genius—there is involved but little, if any, conscious exertion of mind, and therefore, that all geniuses conceive with a facility bordering on the spontaneous; but, on the other hand, in what relates to the giving of a permanent material form to their creations—the more or less mechanical part of their work—there is evident a great diversity of painstaking; some shaping their conceptions into graphic and eloquent expression with ecstatic ease, while others attain the end only through long and painful experiment.

CHAPTER VIII.

IS GENIUS SELF-CONSCIOUS ?

Affirmative Opinions of John Burroughs, Ruskin, Schopenhauer, Goethe, Lord Lytton.—Confirmation of Foregoing Opinions.—Negative Views of Carlyle and Hazlitt.—Examples Confirming the Latter View.—All Geniuses are Self-Conscious, but they Differ in their Control of its Manifestation to Others.

The world has made so many mistakes concerning the possessors of genius—sometimes having failed altogether to recognize their presence, and quite as often having supposed certain ones to be geniuses who eventually disclosed the fact that their metal was largely spurious—that it is not at all surprising that doubt should arise as to whether men of genius have been conscious of their own extraordinary endowments, or of the real value of their own achievements.

Let us first inquire what grounds there are for inclining to the belief that men of genius are measurably, if not fully, aware of their exceptional powers of mind. Some weighty opinions favor this view.

John Burroughs says: "The great man always believes in himself, and in his own opportunities and land."

Ruskin, in his essay on the "True and Beautiful," uses these words: "All great men not only know their business, but usually know that they know it; and are not only right in their main opinions, but they usually know that they are right in them; only they do not think much of themselves on that account. They have a curious under-sense of powerlessness, feeling that the greatness is not *in* them, but *through* them; that they could not do or be anything else than God made them."

Coleridge affirms: "The men of the greatest genius, as far as we can judge from their own works or from the accounts of their contemporaries, appear to have been of calm and tranquil temper in all that related to themselves. In the inward assurance of permanent fame, they seem to have been either indifferent or resigned with regard to immediate reputation. Shakespeare's evenness and sweetness of temper are almost pro-

verbial in his own age. That this did not arise from ignorance of his own comparative greatness, we have abundant proof in his sonnets."

One of these sonnets begins :

"Not marble, nor the gilded monuments
Of princes, shall outlive this powerful rhyme."

And in another the bard felicitates himself :

"Your monument shall be my gentle verse,
Which eyes not yet created shall o'er read,
And tongues to be your being shall rehearse,
When all the breathers of this world are dead;
You still shall live—such virtue hath my pen—
Where breath most breathes, even in the mouths of men."

Schopenhauer declares that no one can be blind to his own merit, any more than the man who is six feet high can remain ignorant of the fact that he towers above his fellows. He notes the pride with which Horace, Lucretius, Ovid, Dante, Shakespeare, and Bacon have spoken of themselves, and quotes the Englishman who wittily observed that merit and modesty have nothing in common except the initial letter. "I

have always a suspicion about modest celebrities," he adds, "that they may be right."

Goethe has declared: "Only good-for-nothings are modest."

Lord Lytton, in "Last Days of Pompeii," affirms: "No one ever possessed superior intellectual qualities without knowing them. It is the proud consciousness of certain qualities that it can not reveal to the every-day world, that gives to genius that shy, and reserved, and troubled air which puzzles and flatters you when you encounter it."

In illustration of the foregoing opinions, we would present the following incidents and facts:

Parrhasius, the great Greek painter, was not only conscious of his extraordinary ability, but is reported to have been conceited to a remarkable degree. Buffon affirmed that of great geniuses of modern times there were but five—"Newton, Bacon, Leibnitz, Montesquieu, and *Buffon*." When Dryden was congratulated on the brilliancy of his famous "Ode on St. Cecilia's Day," he re-

plied: "You are right; a nobler ode was never produced, and never will be."

While Salmasius, Milton's great controversial opponent, was conversing one day, in the royal library, with Gaulmin and Maussac—"I think," observed Gaulmin, "that we three can match our heads against all that there is learned in Europe." Salmasius rejoined: "Add to all that there is learned in Europe, yourself and M. de Maussac, and I can match my single head against the whole of you."

When Kepler, after seventeen years of assiduous investigation, discovered the third of his laws, he ejaculated: "I will indulge in my sacred fury; I will triumph over mankind by the honest confession that I have stolen the golden vases of the Egyptians, to build up a tabernacle for my God far away from the confines of Egypt. The die is cast; the book is written, to be read either now or by posterity—I care not which. It may well wait a century for a reader, as God has waited six thousand years for an observer."

Lord Bacon wrote in his will: "For my

name and memory, I leave it to men's charitable speeches, and to foreign nations and the next ages."

Moore relates the following of the poet Wordsworth: "One day, in a large party, Wordsworth, without anything having been previously said that could lead to the subject, called out suddenly, from the top of the table to the bottom, in his most epic tone, "Davy, do you know the reason why I published the 'White Doe' in quarto?" "No; what was it?" "To show the world my opinion of it?"

Pierre Corneille was quite devoid of all external indications of his splendid mental equipment, and his conversation was frequently very tiresome. When his friends taunted him with these defects, he would complacently retort: "I am not the less Pierre Corneille."

In answer to the Pope's messenger, sent to obtain designs from the best artists of the day for certain important architectural works at Rome, Giotto seized a pencil, instantly drew a perfect circle and handed it

to the messenger, saying, "Here is your drawing." "Am I to have nothing but this?" the astonished envoy inquired. The artist quietly replied: "That is more than enough."

In writing to a dearly beloved uncle, at the time of his greatest prosperity, Raphael says: "I am doing honor to you, to all our relations, and to our country."

When Cicero was questioned as to his extraction, he proudly replied: "I commence an ancestry." Being advised to change his name in order to advantage his political prospects, he indignantly declared: "I will make my name as illustrious as the oldest in Rome." To his friend Atticus he writes: "You know of what thunders I am capable. I need say the less about them, since I think you must have heard me there in Greece." On another occasion, he confesses to the same friend: "Moreover, that little strain of self-conceit which is in me (it is well to know one's faults) is gratified. It used to annoy me to think that the services of the Grand Pasha"—he means Pompey—"to his coun-

try might seem greater to posterity than mine; but I am relieved of all anxiety on that score." In referring to Mark Antony, he uses these words: "Would he wish to engage with me in a contest of eloquence? he would then confer an obligation on me; for what ampler field, what more copious subject could I desire, than opportunity of speaking on behalf of myself and against Antony?" And, more significantly still, he predicts: "For all my toils and pains I have no recompense here; but hereafter, in heaven, among the immortal gods, I shall look back on my beloved city, and find my reward in seeing her made glorious by my career."

Horace appraises his own achievements in the following lines:

"I have built a monument,
A monument more lasting than bronze,
Soaring more high than regal pyramids,
Which neither the gnawing rain-drop
Nor the vain rush of the Boreas shall destroy.
Nor shall it pass away with the unnumbered
Series of ages and the flight of time.
I shall not wholly die."

Being borne home from India, well-nigh

dead with disease, Nelson confesses : " I felt impressed with a feeling that I should never rise in my profession. . . . After a long and gloomy reverie, in which I almost wished myself overboard, a sudden glow of patriotism was kindled within me, and presented my king and country as my patron. Well, then, I exclaimed, I will be a hero! and confiding in Providence, I will brave every danger." Again, complaining of the omission of his name from the *London Gazette* for meritorious conduct at Toulon and the siege of Calvi, he exclaimed : " They have not done me justice; but never mind, I'll have a gazette of my own." And his dying exclamation at the victory of Trafalgar was, " Thank God, I have done my duty ! "

Correggio is said to have exclaimed, when viewing for the first time a picture by Raphael, " I also am a painter."

Titian expostulated against the proposition to destroy Correggio's masterpiece, the " Assumption of the Blessed Virgin," in the words, " If I were not Titian, I should certainly wish to be Correggio."

One of the two portraits carved upon the shield of Minerva in the Parthenon, by Phidias, was that of himself. Macready, the noted English tragedian, pronounced his own acting of Macbeth "a noble piece of art."

Carlyle wrote in his journal, upon the completion of his first book of the "French Revolution:" "It has become clear to me that I have honestly more force and faculty in me than belongs to the most I see. It was always clear that no honestly exerted force can be utterly lost. Were it long years after I am dead, in regions far distant from this, under names far different from thine, the seed thou sowest *will* spring."

Macaulay, comparing himself with certain prominent members of the House of Commons, writes: "I may say without vanity that I have made speeches which were out of the reach of any of them." Of his magazine articles he wrote: "My reviews are thought to be better written, and they certainly live longer, than the reviews of most other people; and this ought to content me." And again: "If I live twelve or fifteen years, I

may perhaps produce something which I may not be afraid to exhibit side by side with the performances of the old masters."

Albert Dürer complacently remarked, when reviewing his own work, "It can not be better done."

"There are only three writers of the French language," said Balzac—"Victor Hugo, Théophile Gautier, and myself."

Pitt, afterward Lord Chatham, did not blush to affirm, "I am sure that I can save this country, and that nobody else can."

Enraged at the failure he made in his first oratorical effort in Parliament, Sheridan swore, "I have it in me, and, by God, it shall come out!"

The Duke of Wellington styled Waterloo "a battle of giants."

Undiscouraged by the meager appreciation the public extended to his "Madoc," Southey predicted: "I shall be read by posterity, if I am not read now; read with Milton, and Virgil, and Dante, when poets whose works are now selling by thousands are only known through a bibliographical dictionary."

Prince Metternich, the great Chancellor of Francis I. of Austria, wrote: "If anyone wishes to write my history, let him have full freedom to the judgment of posterity, which alone can speak with authority of the men who have contributed to make the history of their time."

All are familiar with Cardinal Wolsey's presumptuous utterance, "*Ego et rex meus*" (I and my king).

Milton, directly after his visit to Italy, confessed that he began to entertain the conviction that he "might perhaps leave something so written to aftertimes as they should not willingly let it die."

Swift, then in his decline, one day, laying his hand upon his "Tale of a Tub," gasped, "What a genius I had when I wrote that book!"

During the siege of Paris, Victor Hugo is said to have declared to his family: "Tomorrow I will go forth on to the ramparts; I will allow myself to be killed by a bullet; the Prussians will have killed Victor Hugo, and the war will be at an end."

Goethe confessed: "If I were to say what I had really been to the Germans in general, and to the young German poets in particular, I should say I had been their liberator." Again: "As for what I have done as a poet, I take no pride in it whatever; but that in my century I am the only person who knows the truth in the difficult science of colors—of that, I say, I am not a little proud. There I have a consciousness of superiority to many." And, crowning all, he claims: "All I have had to do, I have done in kingly fashion."

Chateaubriand graciously allowed: "Lord Byron will live; whether as a child of his age, *like me*, he has expressed, *like me*, and like Goethe before us both, passion and wretchedness; and whether my peregrinations and the poop-lantern of my Gallic bark have pointed out the track to the vessel of Albion upon unexplored seas."

Metternich puts into Napoleon's mouth these words: "They call me lucky because I am able; it is weak men who accuse the strong of good fortune." To Josephine he

said, while standing in the palace of the Tuileries: "Behold a place without nobles; in time I intend to render it worthy of his palace who is yet to become the master and arbiter of the world."

When Alexander was desired by his royal father to run for the foot-racer's prize in the Olympian games, he proudly answered: "I will, if I may run with *kings*."

Daniel Webster, when he was reminded by the court that a certain opinion of his run counter to that of the hallowed Lord Camden, replied: "But, may it please your Honor, *I* differ from Lord Camden."

Voltaire is reported as having declared: "I am tired of hearing it repeated that twelve men were sufficient to found Christianity; I will show the world that *one* is sufficient to destroy it."

Thucydides, speaking of his own writing, uses these words: "It is composed so as to be regarded as a possession forever, rather than as a prize declamation intended only for the present."

Xenophon applied to himself the encomi-

um, "as eminent among the Greeks for eloquence as Alexander was for arms."

In a letter written in 1881, Ruskin says: "Had you ever read ten words of mine with understanding, you would have known that I care no more for Mr. Disraeli or Mr. Gladstone than for two old bagpipes with their drones going by steam; but that I hate all Liberalism as I do Beelzebub, and that, with Carlyle, I stand—we two alone now in England—for God and the Queen." When he learned that Mazzini had declared that he (Ruskin) had "the most analytic mind in Europe," he remarked that it was "an opinion in which, so far as I am acquainted with Europe, I am myself entirely disposed to concur." Again, he says: "If, in Wales, my father and mother had given me but a shaggy scrap of a Welsh pony, and left me in charge of a good Welsh guide and his wife, if I needed any coddling, they would have made a man of me then and there, and afterward the comfort of their own hearts, and probably the first geologist of my time in Europe."

Pope, in the maturity of his fame, wrote:

*"I own I'm proud—I must be proud, to see
Men not afraid of God afraid of me."*

The testimony thus far presented will, perhaps, be considered quite sufficient for setting forth the self-conscious aspect of genius; and, in absence of all evidence to the contrary, would, doubtless, incline us to the belief that self-esteem is one of the inseparable flaws of the genuine stone. We shall now proceed to exhibit some specimens of genius, equally as rare and pure as any that have already been presented, who are quite, if not entirely, free from the blemish of self-consciousness.

But before introducing the witnesses in person, we will produce a few opinions of certain well-known genius experts.

Carlyle says: "On the whole, 'genius is ever a secret to itself;' of this old truth we have, on all sides, daily evidence. Shakespeare takes no airs for writing Hamlet and the Tempest; understands not that it is anything surprising." And again: "All greatness is unconscious, or it is little and naught."

The same tone is maintained by Hazlitt in his "Table Talk." He affirms: "No really great man ever thought himself so. He who comes up to his own idea of greatness, must always have had a very low standard of it in his mind. The definition of genius is that it acts unconsciously; and those who have produced immortal works, have done so without knowing how or why. Whatever is done best, is done from the natural bent and disposition of the mind. It is only where our incapacity begins, that we begin to feel the obstacles, and to set an undue value on our triumph over them. Vandyck's excellence consisted in this, that he could paint a fine portrait of anyone at sight." As examples of this characteristic of genius, he names Rembrandt, Correggio, Cervantes, and Shakespeare.

And now for our witnesses to the truth that genius is unconscious of its extraordinary powers and performances.

When Newton—then thirty years of age, and who had already discovered the different refrangibility of light, had invented the re-

flecting telescope, had deduced the law of gravity, and had discovered the method of fluxions—was proposed as a fellow of the Royal Society, he said to the secretary that he hoped he would be elected, in which case “he would endeavor to testify his gratitude by communicating what his poor and solitary endeavors could effect toward the promoting of their philosophical design.” And later still, when near the close of his singularly affluent career, he is reported as having confessed: “I seem to myself like a child playing on the sea-shore, and picking up here and there a curious shell or a pretty pebble, while the boundless ocean of Truth lies undiscovered before me.”

Virgil is recorded to have ordered, on his death-bed, that the *Æneid* be burnt, because he did not think it sufficiently finished for publication.

Tasso remodeled, and thereby injured, his “*Gierusalemme Liberata*,” solemnly declaring, at last: “Did not the circumstances of my situation compel me, I would not print it, even, perhaps, during my life, I so much doubt of its success.”

When Cardinal Farnese found Michael Angelo, then an octogenarian, alone, gazing raptly upon the Coliseum, the latter explained: "I yet go to school that I may learn something."

Sir Walter Scott was quite free from vanity, and declared, in his diary, that no one contemned the "pap" of praise more heartily than himself.

Charles Darwin, referring in his later days to the notice given him when a youth by certain eminent scientists, says: "I was not aware of any such superiority; and I remember one of my sporting friends, Turner, who saw me at work with my beetles, saying that I should one day be a fellow of the Royal Society, and the notion seemed to me preposterous." Alluding to his scientific labors on the famous expedition of the *Beagle* around the globe, he modestly confesses: "But I was also ambitious to take a fair place among scientific men—whether more ambitious or less so than most of my fellow-workers, I can form no opinion." Upon reading one of the numbers of Spencer's "Principles

of Biology," he observes: "I feel rather mean when I read him. I could bear, and rather enjoy, feeling that he was twice as ingenious and clever as myself; but when I feel that he is about a dozen times my superior, even in the master art of wriggling, I feel aggrieved."

Resting here, it will doubtless appear that, as respects both opinions and examples, we have made a decidedly ill-balanced presentation of the question as to whether genius is self-conscious or not. The fault, however, if it be such, is due, we claim, to no partiality of ours, but to the very one-sided nature of the subject itself. For, howsoever many more opinions a more industrious or more wide-ranging collector than ourself might adduce, each attested by its one or more examples, they would, we are satisfied, simply select one side or the other of the question, in about the same ratio of preponderance as characterizes those already presented. This being so, the conclusion is unavoidable that geniuses are almost, if not quite, universally self-conscious of their extraordinary

powers and of the superior quality of their works. The small minority of apparent exceptions to this rule owe their singularity, we would suggest, not to the fact that they are ignorant of their unusual endowments, but rather that they are less self-assertive of those rare powers, and less fond of popular recognition of them, than are the majority—those of the pronouncedly self-conscious order.

In fine, we submit, it is not a question of self-consciousness at all—all geniuses being alike, or nearly alike, cognizant of their intrinsic superiority; but simply a matter of the relative degree of personal insistence with which that sense of singularity is manifested to the world. The few have been content to live upon the self-knowledge of their greatness and the assurance that their work was of a unique and enduring quality; but the many, in addition to this subjective satisfaction, have demanded the meed of public recognition, and rather than forego it, have not hesitated to warm their own palms in augmenting, if not starting the clamor of their applause.

CHAPTER IX.

THE INFLUENCE OF ACCIDENTS.

Verified by Incidents in the Lives of Cuvier, Galileo, Newton, Handel, Haydn, Schubert, Shakespeare, Claude Lorraine, Gibbon, Giotto, Rubens, Cowper, Milton, Burns, Mabillon, Wallenstein, Pisano, Beethoven, Cromwell, Walton, Cowley, Molière, Franklin, Ignatius Loyola, Rousseau, La Fontaine, West, Jenny Lind, Nilsson, Linnæus, Canova, Longfellow.

It is a fairly debatable question, whether, if certain apparently trivial accidents had not occurred, many who now blaze as geniuses in the world's intellectual sky, would have ever appeared above the horizon. In physics, we know there is what is called latent energy. No one would suspect that hard, dull-colored stone, familiarly known as a flint, of being a natural store-house of light and heat. Sudden contact, however, with some other hard body, reveals the surprising truth. What awful power this mere thimbleful of harmless-looking black grains develops when ignited by a blow or a spark!

In like manner do we find genius coiled up or stored away in persons whose exteriors give no intimation whatever of the fact. Indeed, it is very probable that they themselves are as unaware of their dormant possession as the flint is of its unprovoked fire. Accident, however—the merest accident—brings them one day in contact with the spark of an igniting eye, or the touch of a magnetic hand, and suddenly there is revealed to the astonished world the light, the heat, and the electric fervor of a genius. It can not be claimed that the mere incident which sprung the coil or struck out the spark was also creative of the forces thus set free; and yet, on the other hand, had not the incident occurred, who shall say that any such forces would have ever been liberated?

It shall be the aim of this chapter to note some of the seemingly trivial, but really potential, incidents that have accompanied the advent of genius.

The meeting with a copy of Gesner's *History of Animals and Serpents*, with colored

plates, is said to have been the key that opened the door of Cuvier's preference for natural history. The presence of Guido Ubaldi in the little audience that listened to Galileo's first essay, "The Hydrostatic Balance," proved in no small degree the making of his future career as a scientist; for it was alone through the powerful influence of this appreciative patron that the young philosopher secured the chair of mathematics at Pisa, and later a similar honor in the University of Padua. Subsequently, a thing of daily occurrence and observation—the swinging of the great pendant lamps of the cathedral—suggested to his inductive intellect his law of oscillation.

If accounts be true, Sir Isaac Newton's career affords quite a series of illustrations of the point we are now considering. It is said that a kick in the stomach, received from an overbearing and much stronger school-fellow, proved Isaac's first impetus to early mental application. Later on, his uncle, a village rector, discovered Isaac seated under a hedge, so completely absorbed in

the solution of a mathematical problem as not to notice his approach. This at once decided him to intercede for his nephew's return to school. He was successful, and Isaac escaped from his thralldom of farm labor to resume the delightful duties of a student. Then, years after, happened that well-known incident of the falling apple, which suggested to his alert and thoughtful mind the fundamental principle of his system of the universe.

A voluntary upon the chapel organ, then in charge of his uncle, surreptitiously played by the boy George Frederick Handel, decided that his future studies should conform to his own taste—music—instead of the law, that uncongenial one chosen for him by his father. His cousin Frank, a school-master, noticing the precision of the six-year-old's time-beating, gave Haydn his first opportunity to study music. The persistent visits that Schubert made, when seven years old, with a companion, to a piano warehouse, awakened himself and friends to a realization of the unique faculty for music he possessed.

Whatever the cause of Shakespeare's sudden flight from Stratford to London may have been, it is very probable that English drama would have lacked its crown jewels had young William been an exemplary citizen of his native town. And surely the petty theft of a deer, if that it was, may be pardoned the youthful scapegrace, in view of the splendid and imperishable riches his maturer years lavished upon mankind.

Claude Lorraine, after trying divers sorts of service and finding himself suited to none, accidentally hired himself to a painter, and thereby hit upon the one thing that Nature had designed him to do in such splendid manner as no one had ever before acquired. It was while musing amid the ruins of Rome that Gibbon's life-work whispered itself to his mind's ear. It would seem that Giotto, one of the most original and comprehensive of the great Italian artists, owed his entire career to the simple circumstance that, when a shepherd lad, he was one day found by Cimabue, a discerning and philanthropic artist, drawing the picture of a sheep upon a

stone with a pointed rock. The praise that Otto Van Veen, the most celebrated painter of Flanders, bestowed upon one of the little boy's pictures, decided Rubens' parents to permit their son to follow his natural bent. When Cowper asked Lady Austen to furnish him with a subject for a poem in blank verse, she pleasantly replied: "O, you can never be in want of a subject; you can write upon any; write upon this sofa." And thus originated "The Task."

When Ellwood, a learned Quaker, was asked by Milton how he liked "Paradise Lost," which the poet had lent him in manuscript, he replied: "I like it much. Thou hast written well, and said much of 'Paradise Lost;' but what hast thou to say of Paradise found?" Sometime afterward, when Ellwood visited the poet in London, he was shown the poem of "Paradise Regained," and told: "This is owing to you; for you put it into my head by the question you asked me at Charlfont, which before I had not thought of."

Burns declared that the first stirrings of

his enthusiasm are to be attributed to a life of Hannibal which he read when a boy. And it is doubtful if the name of Burns had ever penetrated beyond the limits of his native shire, had not a copy of his first modest volume of poems caught the eye of the genius-detecting Dr. Blacklock, who, in lauding the poet's effort, lamented that he was not then present in Edinburgh to publish another such volume. A letter containing this amiable regret fell into Burns' hands on the eve of his intended departure from England for Jamaica, and instantly determined him to set out for Edinburgh.

Mabillon at twenty-six years of age is said to have been but little removed from an idiot; but at that time he chanced to fall down a stone staircase, and so badly injured his skull that it had to be trepanned. The operation proved phenomenally successful; for from that time forward he displayed the characteristics of a genius. The great Bohemian general, Wallenstein, was regarded in his youth as a fool, until the day he tumbled out of a window. Immediately thereupon

he began to display extraordinary ability. It was to the mere chance of seeing the Pisan sarcophagus that Nicola Pisano owed his subsequent renown as the regenerator of mediæval art in general, and of sculpture in particular.

No doubt it was a great disappointment to the Viennese to learn that their favorite pianist—indeed, the foremost musical virtuoso of the day—had, after a brief triumph of five years, gone hopelessly deaf. It was a still keener disappointment to Beethoven himself, who by nature was eminently fitted to enjoy and also to ennoble society and his art. But it is not at all certain that, had he not been thus cruelly, as it seemed, banished from the concert-room and the *salon*, human ears would ever have been delighted with the transcendent beauties of “Fidelio,” the “Eroica” symphony, “Egmont,” the “Pastoral” symphony, the “Mass in C,” the “Seventh Symphony,” and others of his monumental works.

It had been well for Charles I. had the order of council which prevented a certain

vessel leaving England in 1637, never been issued; for among its passengers were both Cromwell and Hampden. Sorrow at the death of his wife and children, caused a humble hosier of London to seek the tranquility and solace of a rural home; and so English literature gathered into its net the "Complete Angler." Cowley affirms that it was Spenser's "Faerie Queen" that ignited the poetic fire in his own bosom. Molière came to find his own enviable rôle in life by accompanying, when a boy, his grandfather to the theater. The reading of DeFoe's "Essay on Projects" largely shaped Franklin's career; and the idea of instituting a new religious order was first suggested to Ignatius Loyola by the perusal of "Lives of the Saints." The offering of a prize for an essay proved the initiative impulse in the life of Rousseau; while La Fontaine had his own peculiar genius revealed to him while gazing into the crystal depths of Malherbe's poems. Surely, genius never signaled her votary in a sweeter fashion than in the case of Benjamin West, who declared, "A kiss from my mother made me an artist."

A little girl sits at the window of a miserable house on an out-of-the-way street in Stockholm, singing to her kitten. A lady passing by, detects an unusual sweetness in the child's artless song; obtains control of her, affords her instruction in music, and thereby secures to the musical world its supreme nightingale—Jenny Lind. In the midst of that motley Scandinavian crowd at a fair is a slender maiden, whose singing of her native melodies captivates every ear and loosens not a few purse-strings. Among her auditors there chances to be a certain man of means and philanthropic bent, who determines to give the young minstrel an opportunity for study in her favorite art. How sound his judgment was is attested by the glorious outcome—Christine Nilsson.

The advice and influence of a physician who detected the boy's natural fondness for botany, caused Linnæus to be snatched from a shoemaker's shop, where his father had placed him. In the palace of a noble family at Venice a banquet is being prepared. A crowning ornament for the table

is all that is wanting. A stone-cutter, conveniently near by, is applied to, and his grandson—a mere lad—standing by his side, overhears the proposition. “Give me a plate of cold butter,” cries the boy. Out of this with astonishing rapidity and dexterity he models a lion, so life-like in form and posture as to thrill with pleasure the assembled guests. This instantly wins for him the favor and patronage of the noble house, and eventually gives to the world of art the masterful Canova.

One of the most popular and significant poems of American literature owes its existence to the accident of its author chancing, one evening, to hit upon the word “Excelsior,” printed upon a bit of newspaper.

CHAPTER X.

IS GENIUS HEREDITARY ?

The Popular Belief that Genius is not Hereditary.—*Synopsis of Galton's Work on "Hereditary Genius."*—*Grant Allen's Opinion Favoring the Same View.*—*Criticism of said Opinion.*—*The Contrast between the Biases of Geniuses and those of their Parents.*—*Geniuses whose Biases have been Similar to those of their Parents.*—*Preponderance of the Former Instances.*—*Only Mediocre Abilities, or, at best, Talents, Transmitted.*—*Comparative Inferiority of the Children of Geniuses.*—*Geniuses either do not Marry, or else have but few Children.*—*Opinions of Francis Bacon and Charles Morris on these Points.*—*Examples of the Foregoing Scientific Reason for the Infertility of Geniuses.*—*Summary Favoring the Soundness of the Popular Belief.*

If the question, *Is genius hereditary?* were put to a popular vote, we doubt not it would be decided almost unanimously in the negative. It has been customary all through the past to regard genius as something essentially phenomenal, and its possessor as one without either satisfactory antecedents or consequents — a *Linnæa borealis* — a unique, a sublimely isolated being. Of late, however, some have thought that genius, no less than all other manifestations of human

nature, must submit itself as a proper subject for scientific analysis and definition. Just as the features of one's face, the characteristics of his physique, his peculiar bodily movements and intonations of voice may be traced backward to more or less similar physical traits in his ancestors, and also forward to like peculiarities in his posterity, so is it claimed by some that, in conformity with the same inexorable law of heredity, the idiosyncrasies of mind of one whom we call a genius can be discovered in the mental constitutions both of those who have preceded and those who have succeeded him in the genealogical chain. Of such a belief is Francis Galton, who has written an elaborate work upon the subject of "Hereditary Genius." He says: "The arguments by which I endeavor to prove that genius is hereditary consist in showing how large is the number of instances in which men who are more or less illustrious have eminent kinsfolk."

In selecting these instances, however, it is a remarkable fact that he restricts himself

mainly to such classes of distinguished men as judges, statesmen, and military men, concerning whom he makes the following admissions: "The average ability of a judge can not be rated as equal to that of the lower of the two grades [extraordinary geniuses and illustrious personages] I have described;" and secondly: "Unquestionably, the most illustrious statesmen and commanders belong, to say the least, to the classes F and G [sixth and seventh grades] of ability." Did the first of these admissions need any strengthening, we might cite the opinion of one who was himself an eminent British barrister and critic, T. N. Talfourd, who has declared: "For the highest powers of the mind which can be developed in eloquence, even a superior court rarely affords room." And again: "The majority of successful advocates are not men of genius."

The most, we think, that Galton succeeds in accomplishing, may be summed up as follows: Drawing his examples for the greater part from men occupying, according to his own classification, a third or lower rank in

the scale of extraordinary abilities, he shows one hundred and nine out of two hundred and eighty-six judges of England, between the years 1660–1865 inclusive, to have had one or more eminent relatives. However, the only really well-known men out of the whole number do not exceed a dozen, viz.: the Blackstones, the Erskines, the Jeffreys, the Norths, two of each, and the Herberts, of whom there were three.

Out of some seventy names of so-called eminent statesmen who had one or more equally eminent relatives, the following seventeen are the most prominent: Bolingbroke, Canning, Disraeli, Fox, Grattan, Palmerston, Peel, Pitt, Sheridan, Walpole, Wilberforce, Adams, Lord Burleigh, Duke of Guise, Mirabeau, Sir Thomas More, and Richelieu.

Out of about thirty great commanders named, not over fourteen need to claim our attention, namely: Alexander the Great, Napoleon I., Julius Cæsar, Charlemagne, Charles Martel, Cromwell, Gustavus Adolphus, Hannibal, Marlborough, Nelson, Scipio Africanus, Turenne, and Wellington.

Out of about forty literary men, the following are the best known: Addison, Thomas Arnold, Bentham, Boileau, Bossuet, Chateaubriand, Fenelon, Fielding, Grotius, Hallam, Irving, Lamb, Lessing, Macaulay, Niebuhr, the Scaligers, Seneca, Madam De Staël, Swift, Sydney.

Of nearly fifty scientific men, the following are the most conspicuous: Aristotle, Francis Bacon, Buffon, Cuvier, D'Alembert, Davy, Franklin, Galileo, Harvey, the Herschels, Humboldt, Linnæus, Napier, Newton, Pliny, Stephenson, Volta, Watt.

Of twenty-one poets named, these are the foremost: Æschylus, Ariosto, Aristophanes, Byron, Chaucer, Coleridge, Corneille, Cowper, Dryden, Goethe, Heine, Milton, Racine, Tasso, Lope de Vega, Wordsworth.

Of sixteen musicians, the most illustrious are: Johann Sebastian Bach, Beethoven, Haydn, Mendelssohn, Meyerbeer, Mozart, and Palestrina.

Of some twenty painters, the following are the best examples: Correggio, Eyck, Claude Lorraine, Murillo, Raphael, Tintoretto, Teniers, Titian, VanDyck, Paul Veronese.

Out of one hundred and ninety-six eminent divines, only seventeen are inter-related, and eight others have remarkable relationships.

Accepting the names as they stand, we find, upon summing up the foregoing lists, that out of about four hundred and fifty persons classed as eminent, and for the most part ranging from the third class of such downward, and all of whom are claimed to be more or less intimately related to eminent persons, not more than a quarter of the number will satisfactorily answer to the distinction of being illustrious—that is, to use Galton's own definition, "as one man in a million."

And the following is a summary of the same author's attempt to point out the instances of two nearly equally illustrious persons in the same family. Of judges, the most noteworthy names are: Lord Erskine and his brother Henry; Sir Edward Hyde and his son Lawrence; Sir Timothy Lyttleton and his brother Edward. Of statesmen: George Grenville and his son William W.;

Sir Robert Peel and son; William Pitt and son; Sir Robert and Horatio Walpole, brothers, and the sons, Sir Edward and Horace; Richard Wellesley and his brother, the Duke of Wellington; William Cecil and his son Robert, and John Adams and his son John Quincy. Of commanders: Alexander and his father Philip; Hannibal, his father Hamilcar, and his brother Hasdrubal; Maurice of Nassau and his father, William "the Silent;" the Scipios; Vespasian and his son Titus; Henri, Duc de Bouillon, and son Turenne. Of literary men: Thomas and Matthew Arnold, the Scaligers, the brothers Schlegel, the Coleridges, and the brothers Corneille. Of scientists: the Herschels and the Humboldts. Of musicians: the Bachs; Haydn and his brother Jean; Mozart and his father Leopold. Of painters: the brothers Eyck, and the Teniers, father and son.

Now, even allowing to these examples all that is claimed for them, what a mere fraction do they constitute of the four hundred extraordinary geniuses whom our author

assigns as the total of the race's contribution thus far! But when we take account of only such as Galton himself ranks among the very highest types of genius—those possessed of the creative powers of mind—the number of such as have been either immediately or remotely related to others of the same grade of intellect is scarcely appreciable.

Another writer, Grant Allen, who would seem to favor the foregoing view of genius as being hereditary, has recently said: “Every individual amongst human beings is the distinct product of two prior organisms, and he combines elements found in both of them, and sometimes also elements latent in them, but existing in still earlier organisms of the same species. In the main, I suppose we are all agreed that what each man is, he is already potentially at birth; whatever little can be added by himself is at best but an infinitesimal fraction compared with what he derived directly from his parents, or indirectly from his earlier ancestry.” In other words, the essential substance of geniuses,

like that of mushrooms and other forms of suddenly-appearing fungi, requires a relatively long period, and sometimes several generations, for its complete production.

The least intelligible part of Mr. Allen's explanation is, we suspect, the only really valuable portion of it—we mean that “latent element” of parents, or less near ancestors, which, it is surmised, enters into the transmitted nature of offspring. In other words, our scientific analyst would signify that, though geniuses have, just like all other persons, parents, of whose several natures they necessarily partake, yet there also enters into their composition something unperceived, and only surmised as belonging to the nature of one or both parents or remoter progenitors. Now, in our own judgment, that latent, that conjectured, that unaccountable element is genius itself under another name. When the chemist shall have demonstrated to us *how* that two invisible, intangible, imponderable gases, oxygen and hydrogen, by their union form a visible, tangible, ponderable liquid called water, then, and we ap-

prehend not until then, shall we be prepared to clearly comprehend the biological processes involved in the genesis of a genius. And until some such convincing demonstration as we have intimated shall be given, people very generally will continue to hold to the time-honored belief that geniuses are exceptional developments—inexplicable originals.

Perhaps the fairest way of determining in how far geniuses have derived their peculiar endowments from their parents, will be to institute a comparison between the known mental biases of the two parties, as indicated by their several pursuits. In speaking of the parentage of great men, Lowell, in his essay on Wordsworth, observes: "It is rather to be noted how little is known of the parentage of men of the first magnitude, and how often they seem in some sort foundlings." Nevertheless, using the data available, much that is interesting and valuable may be adduced.

Sir David Brewster's father was rector of a grammar school and a teacher of the classical

languages. Lord Nelson's father was a village parson. The parents of Gutenberg, the ardent devotee to industrial pursuits, were mechanic-hating aristocrats. Pythagoras' father was a merchant. Archimedes' father was of royal extraction and high-toned predilections. The father of Buffon, the great naturalist, was a counselor of the Parliament of Dijon. Baron Cuvier's father was an officer in the French military service. Daniel Webster's parents passed their lives upon a farm,

“Far from the madding crowd's ignoble strife.”

The father of Laplace, the eminent mathematician and astronomer, was a peasant. Neither of Sir Isaac Newton's parents was in the least degree remarkable, and had he been ruled by his mother's preferences, he would have died a farmer of Woolsthorpe, instead of the world's supreme philosopher. The father of Linnæus was pastor of a Lutheran church, and neither appreciated nor approved of his son's partiality for the study of nature. Socrates' father was a sculptor, and his mother a midwife. Demosthenes'

father was an armorer and cabinet-maker. Columbus' father was a wool-carder and weaver. Napoleon Bonaparte's father was a Corsican magistrate, whose profession was that of making and keeping peace among men. Haydn's father was a wheelwright, and his mother a cook—employments which, neither singly nor together, would seem to favor the development of "a concord of sweet sounds." A drunken tenor-singer was Beethoven's father. Schubert's father and forefathers for several generations were schoolmasters. Schumann's father was a book-seller. Virgil's father was a farmer, and his mother the daughter of a landholder. An illiterate innkeeper in a small French town was the father of Rabelais, the great satirist. Shakespeare's father was a butcher, or shop-keeper of some sort, and although bailiff and alderman of Stratford, was yet unable to write his own name; his mother was a granddaughter of a *valet-de-chambre* to Henry VII. Were these likely parental factors for forming the world's foremost dramatic poet? France's greatest

comic poet of the dramatic order, Molière, had an upholsterer for father. Goethe's parents, though scholarly and refined, did not manifest, so far as is known, any leaning toward poetry.

It is not easy to see by what hereditary process Milton derived his surpassing poetical imagination from his father, who followed the very prosaic livelihood of a notary. Michael Angelo was descended from a noble family—aye, one allied even to imperial blood. From whence, then, his predominant taste and skill for what was regarded by his kin as a plebeian employment—art? Two pious peasants who worked in mines were parents of that solar orb of reformers—Martin Luther. One of the most eminent of theologians, Calvin, had for father a very obscure notary. A family of fighting, adventure-seeking knights were the progenitors of one of the most retired and studious of men, the world-renowned scholiast, St. Thomas Aquinas. The chief of the Dutch school of painters, Rembrandt, was the son of a very commonplace miller. Salvator

Rosa's father was a mason. Had Albert Durer followed in his father's footsteps, he would have been a silversmith instead of a renowned artist. The father of Benvenuto Cellini, the illustrious Italian artist, was a musician. Diderot's father was a cutler. A Lutheran clergyman gave to the world one of its cleverest critics and dramatists—Lessing. Galen, one of the founders of the science of medicine, had an architect for father, and a second Xanthippe for mother. The author of "A Discourse on the Music of the Ancients and Moderns," was father to Galileo, the foremost scientist and astronomer of his age.

One of the broadest-minded of Italy's great master-artists, Giotto, had for father one of the narrowest-lived of men—a simple herdsman. A mere notary was the father of the most nearly universal genius the world ever beheld—Leonardo Da Vinci, who was civil and military engineer, inventor, historian, logician, antiquary, architect, painter, sculptor, musician, scientist, and poet. Scotland's prince of poets, Robert Burns, was

son of an austere Calvinist—a gardener. A wretched flute-player was father of the gifted Guido. Another eminent Italian artist, Zampieri, was son of a shoemaker. Rubens' father, like Durer's, was a silversmith. The father of England's best-known chemist, Faraday, was a blacksmith. From an ignorant quarry-man was sprung Canova, the transmuter of marble into flesh and spirit. The father of Rollin, the noted historian, was a Parisian cutler. The most famous of Italian novelists, Boccaccio, was the son of a Florentine tradesman, and was himself for a time a merchant's clerk. The father of Southey, and also that of Pope, were linen-drappers. Oliver Cromwell's father was a malt-brewer. The father of Richard Cobden, the eminent English statesman and author, was a poor farmer, whose son's youthful employment was sheep-tending. Benjamin Franklin's father was a tallow-chandler. Hiram Powers' father was a Vermont farmer. Cardinal Wolsey's father was a butcher. The father of Horne Tooke, the English lawyer, wit, and priest, was a dealer

in poultry, or, as the witty son put it to his aristocratic associates at Eton, "He was a Turkey merchant." The renowned German astronomer, Kepler, was the son of a poor innkeeper. Denmark's famous sculptor, Thorwaldsen, was the son of a common fisherman of Iceland. Richard Wagner's father was a police court Dogberry. The foregoing instances would seem to warrant the inference that just as the diamond is supposed to have been slowly elaborated from carbonaceous matter furnished by some dead animal or rotting plant, so from antecedents quite as unpromising sprung the great intellectual "Kohinoors" or "Regents" of the human family.

And now, in order to complete our comparison, and make as fair an exhibit as possible of both sides of the question, let us next note certain instances in which the mental bias of parent and offspring appears to have been identical.

James Watt's early love for tools and his mechanical dexterity may very readily be traced to his father, who was a carpenter and

builder. The father of Palissy, the noted Huguenot potter and naturalist, was a tile-maker and worker in clay. Edmund Burke's father was an attorney of some prominence in Dublin. Alexander's father was Philip, king of Macedonia, a successful general and ruler, and the originator of the famous Macedonian phalanx. Both the father and brother of Hannibal were noted generals. Solon was descended from Codrus. The father of Pericles, Xanthippus, was a successful Greek general, and his mother was niece of Clisthenes, an Athenian statesman. Charlemagne was grandson of the illustrious Charles Martel. Not only were Bach's father and brothers musicians, but his ancestors for generations back were of the same turn of mind. Mozart's father was a professor of music. Weber's father was a man of musical taste and of some skill in the same direction. No little part of Mendelssohn's peculiar bent, and all the merit of his earlier musical training, must be accredited to his highly cultured mother. Raphael's father was a painter of

considerable reputation in his day. John Wesley's ancestors for four generations back had been scholarly churchmen. Van Dyck, the master of portrait painters, was particularly fortunate in his parents, his father having been a painter on glass and his mother a painter of landscapes, from whom, also, he received his earliest art instructions. The father of Bichat, the skilled anatomist and physician, was himself a physician of no mean repute. Alfred the Great was grandson of the great Egbert. Plato declared himself to be descended in direct line from the gods. A pretty shrewd guess, we suspect. Certainly there is no "monkeying" in it!

It is evident, not only from the foregoing partial lists, but it would also be, we apprehend, from even very exhaustive ones, that the instances of similar mental predilection upon the part of parents and their offspring are not only very much fewer than those of an opposite sort, but that they are also of very much less significance. The object of citing instances of the latter kind is to show that genius is transmitted from parent to

offspring; that is, is hereditary. But is this object attained by instances, however numerous, which simply show that mediocrity in a certain direction in the parent sometimes becomes genius in the same direction in the child? Not at all; but, on the contrary, in order to demonstrate the heredity of genius, it must be shown that genius in the parent begets genius in the child. The peculiar endowments of both must be, not only similar in kind, but also nearly, if not quite, equal in degree, and that degree must amount to genius in both cases before any transmission of genius can be allowed to have taken place.

Doubtless there were hundreds of musicians in Austria at the time whose talents were equal, if not superior, to those of Mozart's father, and doubtless, also, quite a number of them had children who were musically inclined and more or less talented; but out of the whole goodly throng there was none whom the world cared to recognize as a genius. Think you Raphael was the only painter of his day who was descended

from an artist father? Would Alexander have been called the Great had his military abilities displayed themselves within the same narrow lists his father's did? Where are all the other sons of reputable attorneys at law who started in life with Edmund Burke? Very many boys learn their father's trade of carpenter, but how few utilize it for building the stately and imperishable renown achieved by James Watt's workmanship!

Assuredly, the most that can be shown in favor of the physical obligations of genius is, that in some instances, and these a striking minority of the whole number, it derives simply its bent—its initiative impulse—from parental predilections. This is all; and in those cases wherein the child develops nothing beyond what it could fairly be said to have inherited from its parents, there results, of course, the same mediocre or simply talented person its parents were—that is no genius at all. But just at that point where parental endowments leave off does genius begin. It takes the forces bequeathed

it by ancestors, and by new adjustments and combinations of these converts the family clay or pewter mug into a goblet fit for the lips of immortals. Not the ability to paint, or carve, or compose, or philosophize, or calculate, or analyze, or combine, constitutes genius; but rather the power to carry on these various processes after a peculiar and extraordinary fashion. The former may be inherited, and constitutes talent; the latter must be generated and evolved in one's own vital laboratory, and is genius.

In the foregoing inquiry we have considered in how far great men have derived their genius from their parents or less near ancestors; let us now regard what may in a sense be styled the reverse relation—the transmission by geniuses of their illustrious parts to their offspring. Who are the acknowledged geniuses who have also had geniuses for children? If from any source, we shall most likely get an answer to our inquiry from the same painstaking investigator we have before had recourse to—Mr. Galton.

We have already cited the best instances he adduces of two nearly equally illustrious persons in the same family. Let us again glance at such of them as stand in the relation of father and son. They are — of judges: Sir Edward Hyde (Earl Clarendon) and his son Laurence (Earl of Rochester). Of statesmen: George Grenville, Premier, and his son Lord William, also Premier; Sir Robert Peel and his son Rt. Hon. Sir Robert; William Pitt (Earl of Chatham) and his son William; Sir Robert Walpole and his sons Sir Edward and Horace; William Cecil (Lord Burleigh) and his son Robert (Earl of Salisbury); John Adams and his son John Quincy. Of commanders: Philip II. and his son Alexander the Great; Hamilcar and his son Hannibal; William the Silent and Maurice of Nassau; the two Scipios; Vespasian and his son Titus; Henri Duc de Bouillon and his son Turenne. Of literary men: Dr. Thomas Arnold and Matthew Arnold; the Scaligers. Of scientists: Sir William Herschel and his son Sir John. Of musicians: J. Ambrose Bach and his son John

Sebastian; Leopold Mozart and his son Wolfgang; and of painters, the Teniers, father and son.

Now, in this meager array of names, which, nevertheless, is the very fullest that Mr. Galton's quite exhaustive research has been able to furnish, how many real geniuses are represented? If any of those classed as judges and statesmen are to be so accredited—and remember that Galton himself places such men in a rank not higher than third—that distinction belongs to William Pitt, the Earl of Chatham; but allowing this to be a correct estimate, it can not be maintained that his son William was also a genius. The only geniuses that appear in the list of commanders are Alexander the Great, Hannibal, and Turenne, the rest being simply successful generals of a much lower than universal type. But none of these illustrious sons of Mars bequeathed a military genius to the world. We do not allow that any of the literary men named were geniuses, or even tolerable approximations. If either of the two scientists named may be regarded as a

genius, it was the son rather than the father. Of the four musicians cited, neither the elder Bach nor the elder Mozart would have ever been known to any succeeding generation had it not been for the world-wide emblazonment of the family names wrought by the genius of the sons. Of the sole illustration borrowed from the realm of art, it must be confessed that, if in point at all, it is relatively weak; the Teniers belonging to the range, rather than among the number of isolated and commanding peaks of artist geniuses. And so we think we may challenge the production of a single example wherein a really great genius has given to the world a son or daughter possessed of an equally eminent endowment. This is certainly the case so far as relates to the world's universally accepted geniuses.

Mr. Hale, writing in *The New England Magazine*, concerning visits to Emerson, says: "I remember perfectly how delicately he put me down one night when I had gone down there, with Galton's 'Heredity' in my bag, and was full of Galton's admirable

stories about the continuation of the same line of life and thought in certain families—the stories of the Pitts, for instance, and, what Galton delights in most of all, the story of our house of Adams. Once and again I tried to bring Mr. Emerson up to take some interest in this, but he would only take the civil interest of one who has a persistent and fussy guest to entertain. But at last he said: ‘No, there is nothing in it. If there were, we should have Weimar to-day full of Schillers, and Goethes, and Richters; and we should have had Athens in the time of Paul full of another set of Socrates and Plato and Pericles. And it was not so.’ I have taken much less stock in heredity since he made that suggestion about Athens and Weimar.”

Indeed, a little study of this matter will show that men of genius not only do not propagate others of their like, but, in very many instances, either do not marry at all, or, in case they do, have but few, if any, children. That wide-visioned English philosopher of three hundred years ago, Francis

Bacon, affirmed: "Surely, a man shall see the noblest works and formations have proceeded from childless men." And again: "Certainly the best works, and of greatest merit for the public, have proceeded from the unmarried or childless men."

A similar opinion is advanced by a scientific writer of our own day—Charles Morris, in *Popular Science Monthly* for September, 1884. He says: "If we consider special cases of noted men, the great generals of the world, the commanding statesmen, the distinguished scientists, the celebrated authors—all, in fact, who have become distinguished for superior mental ability—an almost universal result appears: they have either left no descendants, or their families were very small."

With a view to testing the truth of the assertions just quoted, we have carefully examined a recent work ("The Hundred Greatest Men," edited by Wallace Wood, M. D.), containing biographical sketches of a hundred and nine of the most illustrious men who have ever flourished in the several

domains of literature, art, religion, philosophy, history, science, politics, and industry. We find the following among the number of those who were never married: Leonardo Da Vinci, Michael Angelo, Raphael, Handel, Beethoven, Moses, St. Paul, Erasmus, Bossuet, Plato, Newton, Locke, Kant, and Voltaire, not to name certain eminent ecclesiastics whose vocation enjoined celibacy. A little more than half of the remaining number (forty-nine) were married men, about a quarter of whom were childless, and not more than four or five of whom had families of more than two or three children. More than a third of the whole number (thirty-eight) were left in doubt as to marital relations, nothing whatever being reported concerning marriage or the birth of offspring.

Geniuses, then, as regards offspring, are like the Webbe Shebeyli of Eastern Africa, a deep and rapid stream that flows for hundreds of miles, and finally loses itself in a desert of sand; or they may be compared to neuter insects, who are quite distinct in parts

and in inclinations from either parent, and are incapable of propagation.

If the preoccupation of mind, the intense concentration and absorption of all the less sensuous energies of one's nature, the almost constant devotion to some special end of intellectual endeavor inseparable from the life of every genius, may not adequately account for his comparative indifference toward marital and parental relations, then, perhaps, we may find a more satisfactory answer in the declaration of modern science, that mental exertion actually restricts the reproductive energy. Each individual, it is held, possesses a certain tolerably definite measure of nervous stimulus, which, it is the normal law of one's being, shall be fairly apportioned among all the various organs and parts of the human system. If, therefore, any one of these vital centers comes to arrogate to itself more than its normal share of nervous stimulus, it is plain that one or more others must either suspend their natural functions or else diminish their activity; and this is just what happens in the case of

the genius—he whose imperial brain dominates and tyrannizes over and practically annihilates one or more of the more purely material and animal centers of his mechanism; and so it happens that the genius is married to his particular, his dearly beloved ideal, and his achievements toward realizing this constitute his legitimate, his tenderly prized children.

Summing up, then, the various aspects of the heredity of genius, we think all that can be reasonably claimed in the light either of history, or experience, or modern scientific research, is that intelligent and talented parents are almost sure to have offspring of a similar mental calibre, and that parental biases are not unfrequently transmitted to children. But that unique, that commanding power called genius allows of neither antitype nor duplicate. Though the physical constituents that go to its making must be allowed to have previously inhered in the mental constitutions of parents, yet the outcome of their combination is totally different, if not in kind, then certainly in de-

gree, from the elemental units. Genius, then, like the air we breathe, like the water we drink, like the light that vivifies us, is a compound, not one of whose factors discloses the slightest hint of the glorious product, and whose laws of combination and evolution baffle, and, we believe, must ever baffle, the keenest scientific inspection. Like protoplasm, though it may be resolved into its physical elements, no hand has yet been found cunning enough to devise the formula for recombining those well-known elements into the mysterious whole.

CHAPTER XI.

GENIUS AND ITS ENVIRONMENT.

Varieties of Environment: (a) Home and School Training; (b) Geographical Surroundings; (c) One's Race; (d) The Age in which One Lives.—Influences of Early Training: First, Favorable Influences; Examples of the Same. Secondly, Unfavorable Influences; Examples of Such.—Preponderance of the Latter.

An individual's environment may be said to consist of four concentrics: First, there is that which immediately and most intimately surrounds him—the influences of home, of school, and of early training generally. Secondly, we may name the influences, both physical and æsthetical, of climate and topography; in other words, one's geographical environment. Closely circumscribing the last comes the third element of influence—namely, race; while the fourth and last may be defined as the peculiar intellectual atmosphere—including the elements of moral, social, and political forces—in which one lives.

That each of these elements of environment must prove either favorable or unfavorable for the development of one's peculiar genius, is abundantly witnessed to by the experiences of the world's greatest men.

Let us notice some of these attestations, and, in the same connection also, certain weighty opinions regarding the interdependence that subsists between genius and its environments.

And first we shall consider that most intimate species of environment—the influences of home, of school, and of early discipline. And as these influences must operate either for or against the natural unfolding of the child's peculiar powers, we shall begin by citing examples of geniuses whose early surroundings were propitious.

Watt had around him continually all the tools of the mechanic. Palissy was acquainted with the materials and utensils of the potter from earliest childhood. Cicero's natural tastes were both gratified and stimulated by the rich literary viands of his scholarly father's house. Law-books were

Burke's playthings, and he breathed an atmosphere of jurisprudence from tenderest years. The spirits of Codrus and Solon, as well as the muses of poetry and painting, were the boy Plato's intimates. Noble and cultured were the members of Herodotus' boyhood's home. Alexander's educators were the foremost king and the most sagacious philosopher of his day. Hannibal's nursery was the battle-field. The forum was Cæsar's school-room, and the camp his playground. At one end of the table presided a Greek general, and at the other the daughter of an Athenian statesman, between whom the boy Pericles sat, imbibing teachings from both. Musical instruments were more familiar to Bach and to Mozart than marbles or tops, and these youths could hardly have been more completely surrounded and immersed in music than they were, had their cradles been the inside of a bass-viol or an organ-pipe.

Leonardo Da Vinci was descended from a noble family, lived in a home of refinement, and was schooled in his favorite studies by a

noted painter and sculptor. Raphael's first teacher in painting was his father, himself a very respectable artist. Bossuet belonged to an honorable family, and was carefully disciplined in the direction of his natural tastes. John Wesley was as completely under clerical influences when at home as when at Oxford; for his family for several centuries prior to his birth had largely consisted of scholarly ecclesiastics. Van Dyck's father was a painter on glass, and his mother a landscape artist; and besides these, he was also instructed by the great Rubens. Phidias is said to have been taught in his favorite art by the best masters of his day. Aristotle was thoroughly indoctrinated at Athens in all the wisdom of the Socratic and Platonic schools of philosophy. Lavoisier, the founder of modern chemistry, was of wealthy parents, who, in educating their son, wisely favored and fostered his natural bent toward the sciences. The father of Albert Dürer was a silversmith, and was desirous that his son should embrace the same art; but perceiving the lad to be naturally in-

clined toward drawing, he very sensibly placed him under congenial guidance.

Though the foregoing catalogue of geniuses, the surroundings of whose earlier years were helpful toward their natural unfolding, might be considerably increased, yet must it ever continue strikingly smaller than the number of those who, like the Mexican century-plant, have sprung up and flourished under apparently the most inhospitable surroundings.

Carlyle, in his splendid essay on Burns, queries: "Is not every genius an impossibility till he appear? . . . Let but the true poet be given us, place him where and how you will, and true poetry will not be wanting."

The eminent French critic, M. H. A. Taine, remarks: "Of Shakespeare all came from within—I mean from his soul and his genius; external circumstances contributed but slightly to his development. . . . His genius is pure imagination."

Let us now cite some of those geniuses who, like ivy-berries, would seem to have

required the most rigorous climates to ripen them; or, like electricity, revealed their presence and potency only under pressure or friction; or, again, were like the grape-vine, which, from a soil too sterile to support even weeds, extracts the choicest of wines.

Just as the coral requires for its life and growth exposure to the open sea and the constant beating of the surf, so certain human natures would seem to demand the friction of adverse circumstances to develop their characteristic points of greatness.

Franklin's father was a candle and soap maker—a business not especially adapted, one would think, for the molding of a philosopher. Stephenson's father was an ignorant collier, and George began life as a cow-boy. He was past seventeen years of age before he learned his letters. The inventor of the art of printing was descended from a noble family, who practically disinherited him for his "vulgar" proclivity toward mechanical pursuits. The boyhood home of England's supreme naval commander was the peaceful village parsonage. A French

peasant's hut gave birth to one of the foremost mathematicians and astronomers of the world—Laplace. The only milky-way known to the boy Isaac Newton was to be found in the cow-pasture of his parents' farm.

Had Demosthenes harmonized with his home surroundings and drawn his inspiration thence, he might have made acceptable armor and furniture for Philip of Macedon, instead of very unacceptable orations against him. Handel's father, himself a surgeon, designed George Friedrich for the law, and in order to subjugate the boy's unaccountable and detestable bias for music, forbade him going where music could be heard, and banished all musical instruments from the house. Gluck's parents were too poor to gratify their son's natural yearning for musical instruction, and difficulties opposed him at every step of his career, which nothing but his own extraordinary combativeness and singleness of purpose could have surmounted. Had the chief of song-writers, Schubert, imbibed the influence of his home, and yielded to the tyranny of antecedents

for several generations, he would simply have added one more to the innumerable and indistinguishable company of Germany's school-masters. Schumann's environments were books, and an ardent intention on the part of both parents that he should become a lawyer. But not even the laws of music, as then recognized, could inspire respect in the mind of this pioneer futurist.

What congeniality may we imagine there could have been between the pious, ascetic practices of a monastic school and the unbridled spirit of the great satirist of the Renaissance—Rabelais? Precisely the reverse of the last was the case of the distinguished scholiast, St. Thomas Aquinas. He was descended from a great feudal family, whose every male member had led the stirring, adventurous life of a knight, and who, therefore, regarded with no slight disgust, and opposed with no little obstinacy, his natural bent and determination to enter upon the studious, devotional life of the cloister.

The chief ornament of the Dutch school

of painters, Rembrandt, had to rid his young neck of two millstones—one his father's grain-grinding establishment, and the other the University of Leyden, whither he was sent to be fitted for some learned profession—before he could, salmon-like, make headway in the element that nature assigned him. Between his father's purpose to make a warrior of him, and his mother's antipodal design to fit him for holy orders, Nicolas Poussin came very nearly being torn in two, and France narrowly escaped losing one of her noblest and most versatile masters of art. The happenings of the earlier years of Claude Lorraine's life were singularly at variance with his latent genius. His parents could afford him only the scantiest schooling—and even this went against his mental grain. Out of school, he was apprenticed to a pastry-cook, but he spoilt every pie he got his fingers into. He next took service as a domestic, but soon lost his place through natural awkwardness and absent-mindedness. Finally, adopting the unconventional life of a tramp, he strolled

into Italy, and there, hiring himself to a painter, experienced his real birth—his advent into the life of art, wherein in due time he achieved the distinction of one of the greatest of landscape painters, and one of the most lovable of men.

Salvator Rosa was sent to school to qualify for a learned profession, and his teacher was enjoined to punish him whenever he caught him drawing. The father of Benvenuto Cellini tried his utmost to educate his son for his own profession, that of a musician, but the boy, having neither talent nor taste in that direction, finally ran away from home to escape parental coercion, and to give his genius its necessary freedom. So also were Guido's early days actually wasted in practice on the flute to gratify his father's desire to make a musician of him. Zampieri's shoe-making father thought his son best fitted for the ecclesiastical state; but the son fulfilled only so much of the original intention as involved the portraiture of the merely sensuous and external characteristics of the saints and holy ones of the church.

Faraday spent his youth in his father's blacksmith-shop, and his early manhood in a book-bindery. After what formulary shall we mix these two factors to make of them an eminent chemist? A certain burden-bearing young porter of Athens afterward became famous as Protagoras, sophist and orator, whose back—nay, whose very neck—eventually proved too stiff to bend in reverence even to the gods of the Parthenon. D'Alembert, the French mathematician and author, was a foundling of Paris, and was reared by a poor woman who picked him up on the street. Another barefooted gamin, an orphan, became Beranger, a lyric critic of France, whose stirring and pointed verses did more than many political harangues to bring about the revolution of 1830. Cervantes was a Spanish soldier. The most ethereal and delicate of English poets, Keats, first saw the light of day in a stable. The king of violinists, Paganini, was of illegitimate birth, and very poor. The Dutch national poet, Joost van den Vondel, served as apprentice to a stocking-weaver. The

most magnetic of English revivalists, Whitefield, arose from the condition of a stable-boy. Sir Richard Arkwright, the inventor of the spinning-jenny, was in youth a barber's assistant, and had no schooling until past twenty years of age. In the same trade also were reared Turner and Tenterden, the foremost of English landscape painters. Benjamin West was a Pennsylvania farmer's boy. The trade of watch-maker was that of Beaumarchais, the French dramatist. Hans Christian Andersen, the charming story-teller, was once a cobbler. A kitchen-boy developed into Dr. Prideaux, Bishop of Worcester.

Molière, the head of the comic dramatists of France, was the son of an upholsterer. Though well-educated, he followed his father's business for several years; then studied in turn both law and theology, when, under the stress of some apparently perverse, if not devilish impulse, he joined a band of strolling players, and thereby came into possession of his rightful role upon the stage of life. Correggio was born

of very poor and humble parents; had no teacher, and never studied the works of any artist; and yet, guided by an innate love for art and indefatigable devotion to it, he is claimed to have surpassed even Raphael in exquisite grace of delineation. Dickens' education was of the meagerest sort, and his early employments were of the most humiliating character. Sir David Brewster's father, who was rector of a grammar school, educated his son for the ministry, although his predilections even from boyhood favored scientific studies. Cardinal Richelieu was for a time disciplined for the army. The father of Linnæus, himself a Lutheran pastor, originally designed his nature-seeking son for the church, and later apprenticed him to a shoe-maker. Euripides, one of the three great tragic poets of Greece, tested his abilities as an athlete, then as a painter, then as a student of rhetoric and philosophy, before he became aware of his real fitness. Calvin was educated for the law, but, unfortunately for Draco, he subsequently embraced theology. Lessing, the eminent critic

and dramatist, was designed for priestly orders. Galileo was schooled at first for monastic orders, and afterward for the medical profession. Michael Angelo's father intended him for one of the learned professions, and strove by threats and even blows to deter the boy from following his natural inclinations. Tycho Brahe, the distinguished astronomer, was put to reading law at sixteen, but passed whole nights in pursuit of his favorite study. Audubon's father intended his son for the navy or engineering, and sent him to France to be taught mathematics, drawing, geography, fencing, and music. But even in drawing, the most congenial of them, the boy's natural taste revealed itself in his fondness for representing birds. Meissonier, the greatest, perhaps, of living painters, never knew the date of his birth, or who either of his parents was. His whole youth was passed in poverty and neglect, one scanty meal a day being his usual allowance. He never knew how he learned to paint, and was himself a master when, out of deference to general usage

merely, he consented to study under a well-known artist of his day.

From the foregoing instances — and any multiplication of them would not appreciably affect the result — it would appear that genius, in making its advent into the world, is no respecter of either the abode or the household. The mansion or the hut, the city or the ranch, the philosopher or the ignoramus, are alike privileged to grace its birth-hour. If there be any real preference in the matter, it would seem to lie where Shakespeare has located Sleep's chosen cradle, in the lines :

“ Why rather, Sleep, liest thou in smoky cribs,
Upon uneasy pallets stretching thee,
And hushed with buzzing night-flies to thy slumbers,
Than in the perfumed chambers of the great,
Under the canopies of costly state,
And lulled with sounds of sweetest melody ? ”

Just as the choicest of essences and the most delicate of perfumes are extracted from such coarse and malodorous substances as benzine, coal-tar, and stable-offal, so genius would oftenest seem to be sublimated from the commonest and lowliest of social constituents.

CHAPTER XII.

GEOGRAPHICAL ENVIRONMENT.

Effects upon Man and His Habitat of the Extremes of Temperature and of Configuration.—A Mean between these Extremes Necessary for the Best Products either of the Soil or the Intellect.—Potency of Physical Environment as seen in the Symbolism of the Earlier Religious Conceptions of Mankind.—All Remarkable Peoples, and therefore all Remarkable Individuals, have Flourished within Hospitable Physical Bounds.—The Geographical Lines of such Region.

We now come to consider those less intimate and not so obvious elements of life's make-up—the influences of surrounding geographical factors.

There can no longer be any doubt, if there ever was, that the physical conditions under which a people live have a great deal to do with the constitutional outcome of that people; and, of course, if this be true of a whole community, or nation, or race, it is equally true of every individual of those aggregates, and therefore of the geniuses comprehended therein.

In the first place, it must be conceded by

all that any *extreme* of temperature, whether frigid or torrid—when the permanent and normal status of a region—is wholly preventive of any but the lowest types of human development, be it physical, or intellectual, or æsthetical, or moral, or industrial, or governmental. Tropical, and particularly equatorial, heat completely dries up the mounting sap of human energy; while the intense cold of polar latitudes stagnates and solidifies the natural currents of human endeavor. It is therefore to countries whose climates mainly lie somewhere between these extreme temperatures, and where intensity of heat and cold is the rare exception rather than the rule, that we must look for the peoples and the individuals who have made their presence among mankind effective—historical.

The same, or very nearly the same, assertion may be made concerning the remaining physical constituents of a country. Extremes in configuration—whether it be the monotony of a prairie or desert, or the oppressiveness of surrounding mountains—are

alike productive of natural sterility, and sterility is almost invariably accompanied by poverty in the stock of the inhabitants. A mean between these extremes—the variety which comes from a certain happy blending of the two—is the indispensable condition of fertility in the soil; and where the latter prevails, there is certain to be found the presence of a prosperous and progressive people. Furthermore, where the physical conditions are such as to bring about a prodigality of natural supply, this extreme is quite as preventive of the best results of human growth as the opposite one of sterility; for both alike militate against that healthful putting forth of human energy without which mankind must lapse into stolidity on the one hand or sensuality on the other.

Perhaps the most striking exhibition of the modifying effects of physical surroundings upon mankind is to be met with in the history of the various religious beliefs that have prevailed. And in this connection it should be remembered that until recent

times a people's religious creed comprehended its whole intellectual as well as its emotional experiences. Though, doubtless, not unfamiliar, a few illustrations of the above statement may not be out of place here.

In such countries as Egypt, Babylonia, and Arabia, whose surfaces are monotonously level and quite destitute of physical diversity, but whose cloudless skies and vaporless atmospheres display the heavenly bodies in uncomparable multitude and brilliancy, it was these resplendent celestial luminaries that attracted the eyes, and through these dominated the entire mental and spiritual activities of the people. In Africa and South America, where profuse and colossal forms of animal and plant constitute the most familiar features of man's physical surrounding, the native mind incarnates its deities and religious ideas in trees or beasts of particularly impressive types. In northern lands, where lofty and rugged mountains, rain, hail, snow, and boisterous and icy winds make up the normal

expression of his physical abode, there we find man cherishing such religious conceptions as Thor the thunderer, Woden the stormful, and Loki the vengeful.

On the other hand, in a locality like Greece, where land and water, heat and cold, cloud and sunshine, fertility and sterility, grandeur and beauty of landscape conspired for the production of a most delightfully varied physical panorama, there we find the human mind symbolizing in each of these numberless natural appearances some conception pertaining to the supernatural. Snow-capped and cloud-gated Olympus suggested the inaccessible abode of the gods, while any one of the many and lovely valleys might serve as a type of Elysium, the garden abode of the departed good. Thunder and lightning were lodged in omnipotent Zeus; roseate morning was known as blushing Aurora; the all-conquering light and heat of the sun betokened chariot-driving Phœbus Apollo; the quaking, noise, and eruptive destruction of the volcano were indicative of the smithy occupations of brawny

Vulcan; the delights of the chase were dedicated to virtuous Diana; conviviality, inspired by wine, claimed voluptuous Bacchus for its patron; while each water-course was haunted by its nymph, and each wood by its dryad, with character expressive of their material peculiarities.

But illustrations like the foregoing might be adduced almost without limit to show how that, without exception, all the religious conceptions—which is tantamount to saying all the intellectual conceptions—of the primary branches of the human family have been signally and quite permanently influenced by the physical environment of the peoples cherishing them. The application we would make of this clearly admissible fact is that physical environment, so potent in its modifying effects upon the mental life of the past, is still, and always must be, a great leavener of human conceptions, a dynamic force in the life of every man, and particularly in that of the genius; for the latter must be allowed to be as preternaturally sensitive to the touches of

nature around him as he is extraordinarily endowed in other respects.

In harmony with the foregoing observations, and as a logical induction from them, it may be added that just as no people of more than ordinary intelligence has ever flourished within inhospitable physical bounds, so no genius has ever been known to have sprung up in a country of pronouncedly unfavorable physical conditions. It is not the poles, with their ice-locked and desolate solitudes, nor the equator, with its exuberance of fauna and flora; it is not the snow-wrapped mountain height, nor the low-lying desert, none of these, that has chanced to be the cradle of extraordinary men. Rather do we find them only within climates and localities which are the means of these extremes, and where a certain variety of natural phenomena prevails.

The extreme geographical limits, then, of the possible habitat of geniuses may be defined as the Arctic Circle and the Tropic of Cancer, about midway between which lies its most favorable region.

CHAPTER XIII.

ENVIRONMENT.—INFLUENCE OF RACE.

All Great Achievements have Proceeded from either the Caucasian or the Mongolian Race; ergo, all Geniuses have Emerged from One or the Other of these Races.—Confirmatory Opinions of Grant Allen and John Burroughs.

A third element of environment is race; by which we would designate all those physical and mental peculiarities inhering in the distinctive character and constitution of the people among whom one's life is cast.

If we catechise human history we shall find that all the great achievements of the past, whether material or intellectual, social or political, have proceeded from but two of the five generally recognized races—the Caucasian and the Mongolian.

The but little understood and yet splendid civilizations of the Orient—those of China, Northern India, Mesopotamia, Syria, Egypt, and Carthage; the more recent, and in many points superior, enlightenment of the classic epoch; also the latest, the present, whose

theaters of display are Europe and North America—these all had their beginning and development among one or other of the various branches or families constituting the two races above named. This fact, as a matter of course, comprehends the minor one—but that in which we are especially interested—namely: that all of the extraordinary individuals—the geniuses known to us—have emerged from one or other of the branches of these same most influential races.

The reason for this is so obvious that we need hardly pause to indicate it. The genius confessedly must be made up of not only such human stuff as is found alone in a superior race, but also only of the best of such stuff; for he must be a superior among superiors—the consummate flower, the surpassing fruit of his people—else is he no genius at all, but one at best only a little above the undistinguished average.

Race, then, we must admit to be an indispensable factor—indeed, the most fundamental physical condition of genius. But

race itself, as we have already tried to show, is in great part the natural outcome of geographical environment; and so the influence of race upon genius resolves itself ultimately into the prior consideration of the influence of geographical condition upon genius.

Grant Allen, in a recent essay, also indicates the power of race and national characteristics upon individual development. He says: "Except in a generally mechanical race, you will not find a Watt or an Edison; except in a generally literary race, you will not find a Shakespeare or a Goethe; except in a generally æsthetic race, you will not find a Leonardo or a Beethoven.

"Every race possesses a certain mean of character — intellectual, emotional, moral, and æsthetic. From this mean variations arise in every particular on either side, and the variations always bear a certain general proportion to the mean; they seldom very largely deflect from it in either direction, and never very largely in the direction of higher or increased powers. If fortuitous geniuses were to spring up independent of

function, we might find an occasional philosopher among the naked Australians, or a stray Cimabue among the half-human Veddahs. If you can account for the average, you have accounted for the exceptions, which must, as a mathematical necessity, arise from the constant blending of variously constituted stocks. And when we ask, What accounts for the average? there is only one answer possible—the geographical environment.

“There could have been no Shakespeare if the Elizabethan audiences of the globe had not been prepared to appreciate the delicate fancy of ‘*Midsummer Night’s Dream*’ and the vulgar badinage of the ‘*Merry Wives of Windsor*.’ Athens had a Parthenon, not because there was a Phidias there ready to build one, but because there was a large body of citizens who wanted a Parthenon built. The geographical conditions had set most Athenians on the artistic groove, and thus many of them took to art as their most natural career.”

Following in the same train of thought

come the opinions of John Burroughs upon the subject. He writes: "Does anyone doubt that the great poets and artists are made up mainly of the most common universal human characteristics? that in them, though working to other ends, is all that makes the soldier, the sailor, the farmer, the discoverer, the bringer-to-pass in any field, and that their work is good and enduring in proportion as it is saturated and fertilized by the qualities of these? Good human stock is the main dependence. No great poet ever appeared except from a race of good fighters, good eaters, good sleepers, good breeders. Literature dies with the decay of the unliterary element. It is not in the spirit of something far away in the clouds, or under the moon—something ethereal, visionary, and anti-mundane—that Angelo, Dante, and Shakespeare work, but in the spirit of the common nature and the homeliest of facts; through these, and not away from them, the path of the creator lies."

CHAPTER XIV.

ENVIRONMENT.—INFLUENCE OF THE AGE.

That the Age forms the Man is affirmed by Macaulay, Alison, Matthew Arnold, and Emerson.—Influence of Enlightenment.—Opinion of Addison.—Macaulay regards the Creative and the Critical Faculties as opposed to each other.—Reasons of Alison for believing Civilization an impediment to the rise of Geniuses.—An Enlightened Age unfavorable to the rise of only one sort of Genius—the one whose creations involve chiefly the free exercise of the imagination and the emotions—all others being favored by increase of knowledge.

Let us now consider the fourth and last-named factor of human environment—the influence upon him of the peculiar civilization of the age in which the genius lives.

Macaulay, in his essay on Dryden, declares: “In fact, it is the age that forms the man, not the man that forms the age. Great minds do indeed react upon the society which has made them what they are; but they only pay with interest what they have received. We extol Bacon, and sneer at Aquinas; but if their situations had been changed, Bacon might have been the Angel-

ical Doctor, the most subtle Aristotelian of the schools; the Dominican might have led out the sciences from their house of bondage. If Luther had been born in the tenth century, he would have effected no reformation."

The very same thought is expressed by Alison in his essay on Bossuet, when he says: "How much soever we may ascribe—and sometimes with justice ascribe—to the force and ascendant of individual genius, nothing is more certain than that, in the general case, it is external events and circumstances which give a certain bent to human speculation, and that the most original thought is rarely able to do much more than anticipate by a few years the simultaneous efforts of inferior intellects."

Matthew Arnold also recognizes the weight of circumstances. He writes: "For the creation of a master-work of literature two powers must concur, the power of the man and the power of the moment, and the man is not enough without the moment."

And the foregoing opinions are substan-

tially indorsed in the following pithy utterance from Emerson: "The greatest genius is the most indebted man."

Is an enlightened age favorable to the development of genius? Addison locates one of his two kinds of great men in such an age, and says of such: "This class of great geniuses are those that have formed themselves by rules, and submitted the greatness of their natural talents to the corrections and restraints of art. Such among the Greeks were Plato and Aristotle; among the Romans, Virgil and Tully; among the English, Milton and Sir Francis Bacon. The genius in both these classes of authors [the first class being men who have sprung to celebrity without educational aids] may be equally great, but shows itself after a different manner. In the first it is like a rich soil in a happy climate, that produces a whole wilderness of noble plants, rising in a thousand beautiful landscapes, without any certain order or regularity. In the other it is the same rich soil, under the same happy climate, that has been laid out in walks and

parterres, and cut into shape and beauty by the skill of the gardener."

It seems to be the general opinion, however, that genius and that power which comes from intellectual discipline, and is ministered to by a high degree of surrounding culture, are incompatible, or at least unneighborly.

Just as the highest degree of homogeneity, thickness, and evenness in glass detracts from its susceptibility to the most brilliant color effects, so extraordinary culture, it is thought, tends to interfere with the finest displays of genius.

In his essay on Dryden, Macaulay uses these expressions: "It seems that the creative faculty and the critical faculty can not exist together in their highest perfection. While he [referring to Shakespeare] abandons himself to the impulse of his imagination, his compositions are not only the sweetest and the most sublime, but also the most faultless that the world has ever seen; but as soon as his critical powers come into play he sinks to the level of Cowley, or rather he

does ill what Cowley did well. The only thing wanting to make his works perfect was that he should never have troubled himself with thinking whether they were good or not.

“The few great works of imagination which appear in a critical age are, almost without exception, the works of uneducated men. Thus, at a time when persons of quality translated French romances, and when the universities celebrated royal deaths in verses about Tritons and Fauns, a preaching tinker produced the *Pilgrim’s Progress*. And thus a ploughman startled a generation, which had thought Hayley and Beattie great poets, with the adventures of Tam O’Shanter.”

In one of his astute, graceful, and eloquent essays, Alison declares: “Genius sinks in the progress of society, as much as science and the arts rise. Originality perishes amidst acquisition. Freshness of conception is its life; like the flame, it burns fierce and pure in the first gales of a pure atmosphere, but languishes and dies in that polluted by many breaths.”

And the same author proceeds to account for this incompatibility between creative genius and enlightened environments in the following passage :

“There is a most grievous impediment to genius in later, or, as we term them, more civilized times, from which, in earlier ages, it is wholly exempt. Criticism, public opinion, the dread of ridicule, too often crush the strongest minds. The weight of former examples, the influence of early habits, the halo of long-established reputation, force original genius from the untrodden path of invention into the beaten one of imitation. Early genius feels itself overawed by the colossus which all the world adores; it falls down and worships instead of conceiving. The dread of ridicule extinguishes originality in its birth. Immense is the incubus thus laid upon the efforts of genius. It is the chief cause of the degradation of taste, the artificial style, the want of original conception, by which the literature of old nations is invariably distinguished. The early poet or painter who portrays what he

feels or has seen, with no anxiety but to do so powerfully and truly, is relieved of a load which crushes his subsequent compeers to the earth. Mediocrity is ever envious of genius—ordinary capacity of original thought. Such envy in early times is innocuous, or does not exist, at least to the extent which is felt so baneful in subsequent periods; but in a refined and enlightened age its influence becomes incalculable. Whoever strikes out a new region of thought or composition, whoever opens a fresh vein of imagery or excellence, is persecuted by the critics. He disturbs settled ideas, endangers established reputation, brings forward rivals to dominant fame. That is sufficient to render him the enemy of all existing rulers in the world of taste. Racine's tragedies were received with such a storm of criticism as well-nigh cost the sensitive author his life; and Rousseau was so rudely handled by contemporary writers on his first appearance that it confirmed him in his morbid hatred of civilization. The vigor of this great man, indeed, overcame the obstacles created by contem-

porary envy; but how seldom, especially in a refined age, can genius effect such a prodigy! how often is it crushed in the outset of its career, or turned aside into the humble and unobtrusive path of imitation, to shun the danger with which that of originality is beset!"

It will be noticed that in the foregoing criticism the influence of learning is represented to be inimical to but one sort of genius—that in which imagination constitutes the preponderating element. We think it can not be doubted that the chief works of the most nearly pure imagination among every people have originated either in the earliest—the least lettered—years of their national existence, or else with authors who themselves were unschooled, or else, if educated, have proudly chosen to rely upon their own intellectual birth-dower. Such surely is the history of such works as the *Iliad* and the *Odyssey*, the *Arabian Nights Entertainments*, the *Nibelungen Lied*, *Don Quixote*, the *Arthurian Legends*, the *Canterbury Tales*, the *Robin Hood Ballads*, the

Faerie Queen, Pilgrim's Progress, and others of a like prevailinglly imaginative order of composition.

The case is different, however, with all other orders of genius. Every known machine and mechanical principle aids the inventor in devising improved methods or in hitting out new processes. Every additional fact and law in science only the more completely equips the investigator for detecting new phenomena or new functions of well-known agents. No past period in the history of science or of mechanical invention has been so luxuriant in increase of knowledge or so affluent in its accumulated stores of specific intelligence as has the last half-century; and yet within this very period of noontide illumination have been discovered some of the grandest scientific truths ever known to man, and some of the most ingenious, useful, and wonderful inventions ever contrived by the human mind. Genius, then, of the scientific and inventive order, would seem to thrive upon multiplication of facts; and the more brilliant and numerous

the lights of knowledge turned upon it, the intenser its own reflections and the more dazzling its native coruscations.

But what we have claimed for these two particular orders of genius—the scientific and the inventive—is equally applicable to all sorts of constructive, synthetic, and generalizing geniuses. Facts, truths, principles, these are the raw materials upon which they work, and out of which they weave their fine-textured systems, or smelt their golden laws. The more prolific, then, the age in these essential knowledges, the greater the opportunities and incentives of the geniuses of that age for distinguished achievements. An enlightened age, therefore, must be regarded as not only favorable for the rise and maturity of geniuses generally, but as absolutely essential to such a consummation.

One variety only can claim exemption from this general rule, and that, as we have already seen, the kind that either spins its marvelous fabrics quite exclusively out of the immaterial essences of imagination pure and simple, or else restricts its activity to those

fundamental sentiments and emotions of mankind which, in every clime and age of the world, have remained, and always will remain, substantially unchanged. The philosopher in physics, in mechanics, in politics, in religion, in sociology, in morals, in æsthetics, must predicate his own original triumphs upon a knowledge, if not of all that has preceded him in his special field of inquiry, then certainly of the best of such, and the broader and more exact such knowledge, the surer his chances of original exploit and the more lustrous such exploit; but the poet and the romancist may, in a great measure, dispense with the officious services of learning, though there is no necessity for their so doing; and the instances of such independence are comparatively few.

CHAPTER XV.

ENVIRONMENT.—INFLUENCE OF THE AGE— CONTINUED.

The Great Geniuses of the Race center around the Fourth and Fifth Centuries before Christ, and the Sixteenth, Seventeenth, Eighteenth, and Nineteenth of our own Era.—The Geniuses of the Ante-Christian Centuries have belonged almost entirely to the Greek Nationality.—Reasons for this Monopoly.—The four Genius-attracting Centuries of the Christian Era considered in Chronological Order.—Preparatory Events.—The discovery of Gunpowder, invention of the Mariner's Compass, rounding of Cape of Good Hope, discovery of America, revival of Literature and of the Arts and Sciences, and the Reformation.—The Sixteenth Century—its Wars, its Scientific Progress, its wonderful Art and Literary developments.—The Seventeenth Century.—Rise of the Spirit of Nationality.—Wars of the Century, and its Illustrious Military Leaders.—Its Intellectual Movements.—The Golden Age of France.—Literature and Science in England, and Art on the Continent.

If we arrange the names of acknowledged geniuses under the various centuries in which they have severally flourished, we shall find them grouped around certain chronological nodes, which we can not fail to notice are both few in number and peculiar as to location. Of those who lived before the

Christian era, by far the greater number will be met with in the fourth and fifth centuries; while the sixteenth, seventeenth, eighteenth, and nineteenth centuries quite monopolize those who have flourished since the time of Christ. The latter number, too, is quite equally divided between the four centuries named.

The query very naturally arises, Why this peculiar and very irregular distribution of geniuses? What extraordinary and specially propitious influences belonged to these above-named centuries, that caused them to act like mighty intellectual magnets, attracting to themselves the finest tempered and most sterling metal of the human race? Let us consider briefly the social, political, and intellectual characteristics of these exceptionally fruitful centuries, and see, if we can discover any necessary connection between them and the illustrious minds that adorned them.

Let us attend, first, to the two centuries that lie before the Christian era. Of course, in the civilizations that preceded these peri-

ods there are to be found, at intervals, isolated names of illustrious men, such as Confucius, Nebuchadnezzar, Sesostris, Moses, David, Solomon, Zoroaster, Cyrus; but it must be owned that our knowledge of those early ages and Oriental peoples is so scanty and unsatisfactory, that we are precluded from forming any definite notions of the social and intellectual environments of the few extraordinary men whose names have survived, but who themselves are hardly more than mythic. Excepting from this remark the names of Moses, David, and Solomon, still must we exclude them from our present consideration, upon the ground of the accredited supernatural influences by which they were actuated. Well-authenticated and purely human factors are the only ones we feel warranted in dealing with in our present inquiry. And so we come to the two centuries before Christ—the fourth and fifth—within which we find gathered a remarkable number of illustrious men, and concerning which we have sufficient data to enable us to judge intelligently of their peculiar social and political institutions.

A fact still more surprising than that which restricts the geniuses of the ante-Christian era to two consecutive centuries is this: these geniuses, almost without exception, belonged to one and the same nationality—the Greek.

This people, the most remarkable that has ever arisen, had been forming for an indefinite period anterior to the times now referred to. Originally of a strong, active, aggressive stock, they, by the mountainous character of their country and its extraordinary exposure to the sea, had been developed into a courageous, independent, freedom-loving people at home, while abroad they were bold, enterprising, commercial, and colony-planting. Domestic rivalries discovered their governmental talents, as well as their military energies, to the utmost, while contact with the older Eastern civilizations enabled them to cull thence the choicest products of those riper experiences. Then the mild and equable climate of their peninsular home—its all but cloudless sky, its endless variety of valley, mountain, and water-margin—these

physical environments, through the agency of poet and philosopher, had wrought in the preternaturally susceptible Greek mind a fabric of cosmogonical and theogonical conceptions more elaborate, significant, and ideally beautiful than anything before known of among men.

Up to the fifth century before Christ, if we may discard the great event of her mythic cycle—the Trojan War—Greece had achieved no foreign military exploit, neither were any of her internal struggles of national importance. But just at this time occurred the event which called forth into their fullest action all those teachings of liberty, of patriotism, of personal, local, and national prowess, of poetic fervor, of oratory, and of national piety, that the five or six centuries of previous domestic training had engendered and stored up in this remarkable people. Her whole preceding history may be regarded as her childhood and youth, and the domestic contentions of that period as the athletic exercises of the gymnasium, while the present event—the Persian War—

marks the commencement of her full-grown, her Amazonian maturity. And what a maturity that proved to be that could maintain itself against, nay, overcome, such tremendous odds as were hurled against it in those two Persian invasions—odds in numbers, in military equipment and supplies, and in the experience of arms and prestige of conquest! And what a salutary effect the disclosure of the innate military genius of the people had upon their whole subsequent development! It was devoted, not, as with the Romans, to foreign aggressions, but, as in the case of the Spartans, to perfecting a complete domestic military establishment, and, as with the Athenians, in evolving a form of government that secured to every citizen fullest liberty of action, and stimulated him to most ambitious endeavor.

Is it any wonder, then, that events which called forth, as their inevitable results, the extremest exercise of such qualities as patriotism, physical and moral courage, and piety, and, as their remoter consequences, the privilege of and incitement to the fullest

display of the human faculties in the direction of art, poetry, philosophy, statecraft, commerce—is it any wonder that such events should have discovered, in all departments of human endeavor, men endowed with extraordinary powers of mind? And so, immediately following, if not attending, these great social and political disturbances, we find coming to light the greatest number of the greatest geniuses that flourished in any one or two centuries anterior to the Christian era, of which we have reliable data.

The lives of the three greatest dramatic poets of Greece were, in a truly remarkable manner, connected with the battle of Salamis; for Æschylus fought in the ranks upon that occasion, Sophocles was one of the chorus of youths that aided in celebrating the victory, and Euripides was born on the day of the engagement. Moreover, the events of the Persian War, and the phenomenal development in literature and the arts that shortly ensued, became the informing themes of the writings of these dramatists. Contemporary with the last-named of the

three was Aristophanes also, who brought comedy to perfection. Within this same period, also, the prose literature of Greece was ushered into richest bloom : philosophy, under the undying touch of Socrates, Plato, and Aristotle; history, by the indelible pens of Herodotus, Thucydides, and Xenophon; rhetoric and oratory, by the still audible tongues of Isocrates, Demosthenes, and Æschines: Architecture and sculpture, too, the most virile and enduring of all the rich bequests of Greece's classic days, arose to their highest perfection under the speaking chisels of Phidias, Scopas, Praxitiles, and Lysippus; while painting achieved its first great triumph under the cunning hands of Parrhasius, Zeuxis, Timanthes, and Apelles.

Leaving now the two centuries preceding the Christian era which drew to themselves the greatest number—indeed, the only surprising number—of extraordinary men, let us next come to the genius-attracting centuries of our own era. These, as we have already indicated, are four consecutive centuries—the sixteenth, the seventeenth, the

eighteenth, and the nineteenth. Out of about one hundred and twelve men of confessed genius who have flourished in the nineteen centuries of our era, the seventeenth and nineteenth may claim a little less than one-quarter each of the entire number, the sixteenth about a fifth, while the eighteenth comprises nearly a third. Inasmuch as our inquiry concerning the unusual richness in geniuses of the fourth and fifth centuries B. C. would seem to have been rewarded by something like a satisfactory answer, let us next scrutinize to the same end the sixteenth, seventeenth, eighteenth, and nineteenth centuries A. D., taking them in their chronological order.

For a century or more preceding the sixteenth, events were happening which were destined to bring about the most potent and perpetually wholesome results. The discovery of gunpowder wrought the rapid disintegration of chivalry, and the substitution of entirely new methods and appliances in the art of war. The invention of the mariner's compass imparted an impulse to navi-

gation which was paralleled in the domain of letters by the mighty influence attending the introduction of the printing-press. Guided by the compass, we find the Portuguese, during the latter part of the fifteenth century, extending their explorations along the western coast of Africa, including its outlying islands, rounding the Cape of Good Hope, and mastering a passage to the East Indies, wherein with great perseverance and courage they succeeded in planting commercial stations, and thereby opened a new and highly advantageous door-way to the rich merchandise of the Orient. A like zeal in other quarters brought about the still more hazardous, as well as more noteworthy, voyage of discovery to the New World, and the shortly succeeding conquest by Spaniards of its most civilized portions.

A little anterior to, as well as contemporary with, the foregoing commercial developments, there arose and flourished in Italy a season of extraordinary mental activity. Splendid courts and opulent cities contended with one another as patrons of the arts and

sciences. Reigning families and several of the popes set about collecting manuscripts and founding libraries and schools, while printing establishments sprung up in numerous localities. The old Latin tongue was sedulously cultivated, and refugees from Byzantium introduced the study of the ancient Greek literature. From Italy this intellectual ferment spread into Germany, where universities, gymnasiums, and educational institutions of all sorts speedily arose.

But mightier and, if possible, wider than the material influences of vast and valuable discoveries, than the intellectual influences of, perhaps, the most useful of inventions and of a revival of literature, art, and science, was the spiritual force of a movement which had its inception in the latter part of the fifteenth century—we mean the Reformation. The great wave of intellectual melioration of the century, to which we have just referred, produced no perceptible effect upon the sacerdotal orders of the so-called Christian church of the period. The lower clergy were sunk in ignorance and immoral

sloth, and the higher were largely given up to sensual indulgence and princely extravagance—both alike quite indifferent to the spiritual and holy interests of their sacred stations. The laity very generally perceived this spiritual declension, and in a more or less aimless way sought to remedy it; but not only were their protests not heeded, the truly devout both of the laity and clergy were at last stung into open revolt by the alarming abuses of the head and of the leading members of the church. Thus, in brief, originated the Reformation, with the Augustine monk, Martin Luther, as its master spirit.

From Germany, its cradle, this regenerating movement swept over the whole of Christianized Europe and Great Britain, dividing all Christendom into two uncompromising parties—those who sustained the time-honored authority of the Roman church, and those who believed a thorough purification of religious faith and practice necessitated a complete separation from such church. Church and state in those days

were too intimately interwoven not to be mutually and radically affected when either member was assailed; consequently, domestic, civil, and national disturbances of the most sanguinary nature and most vital consequences arose out of this difference of view regarding spiritual affairs, and shook to its very foundations the fabric of society during the two or three centuries that followed.

Now, taking into account these mighty happenings of the latter part of the fifteenth and the whole of the sixteenth century, is it not evident that the material, the intellectual, the social, the political, and the spiritual interests of mankind in those days existed in a state of phenomenal ebullition? Is it any wonder, then, that men of capacities and abilities equal to the extraordinary demands of the day should have arisen? With such battles to be fought as those involved in the struggle between the House of Hapsburg and France, the War of Religion in Germany, and the achievement of the independence of the Netherlands, is it not reasonable that we should expect to en-

counter such military leaders as Charles V. of Germany, Francis I. of France, Prince Maurice of Saxony, William of Orange and his son Maurice, and the Spanish generals Alba and Parma ?

In like manner, the religious disturbances preparatory to, and consequent upon, the Reformation furnished abundant material and propitious conditions for the production of such fervent, fearless, and pious champions as Luther and Melancthon, in Germany; Zwingli and Calvin, in Switzerland; Arminius, in the Netherlands; Knox, in Scotland; and Cranmer, in England.

Science, too, during the sixteenth century experienced several of the mightiest impulses it has ever known. In Germany, Nicholas Copernicus exposed the utter falsity of the Ptolemaic system of the universe, which had been the accepted belief for fifteen hundred years, and demonstrated the truth of a theory—his own—which, it is very safe to predict, will last as long as the planets whose motions it defines. Kepler, also a German, discovered his three great

laws respecting the orbits and motions of the planets; and the Italian, Galileo, made his valuable observations concerning oscillating and falling bodies, and just across the border of the century invented the telescope and microscope.

In this century, and in Italy, we also meet with the most gifted artists the world has ever known, in the persons of Michael Angelo, Raphael, Titian, Leonardo Da Vinci, and Correggio, who marked the culmination of that art movement of the age known as the Renaissance—the new birth of the antique, and the abandonment of the traditional and conventional for what was natural.

Literature also met with a mighty awakening in this century, and gave to the world not a few of its foremost poets and prose writers. Such in England were Shakespeare, Spenser, Jonson; in Italy, Macchiavelli, Ariosto, and Tasso; in the Spanish peninsula, Cervantes, Lope de Vega, and Camoëns; in Germany, Hans Sachs, Brandt, and Fischart; and in France, Rabelais and Montaigne.

THE SEVENTEENTH CENTURY.

The great intellectual and religious forces so active and efficient in the sixteenth century, far from exhausting themselves in that compass, continued to operate, certainly with unabated, if not increased, vehemence during the century immediately following. Particularly was this the case with the religious movement that took its rise in the Reformation ; for, though the conflicting interests of Catholicism and Protestantism may not be alleged as the primary cause of the many wars that characterized the seventeenth century, yet did they constitute a very prominent feature in each. Perhaps the new and distinctive phase of the century was the spirit of nationality that arose in almost every quarter. The Protestant states of the German Empire, in forming a union and arraying themselves in opposition to the tyranny and intolerance of Austria and the Catholic League, took the initial step toward German unification. France and Switzerland undertook the hazardous task of enlarging their respective territories, and thereby

augmenting their national importance; while England not only achieved her rank as mistress of the seas, but also began to regard continental nations with magisterial concern.

What a seething caldron the whole of Western Europe and also the British Isles became during this century! In Germany there arose the Thirty Years' War, dividing the empire into two religious (?) camps—the Protestant Union, assisted by France and the Dutch, and the Catholic League, supported by Austria and Spain. When, after twelve years of carnage, the latter party seemed to be gaining the advantage, Sweden, moved not only by her Protestant sympathies, but also by the belief that it was an opportune moment for enlarging her own borders, entered the fray. Then, some five or six years later, when the supremacy seemed again to be about to rest with the imperial party, France eagerly embraced the opportunity for humiliating her rival, Austria, and for adding to her own possessions, by vigorously aiding the Protestant powers,

until a peace advantageous to the latter and herself was finally conquered. Later still, the efforts of Sweden to conquer Poland and Denmark constitute a brilliant figure in the century. In England, the subversion of the monarchy, the establishment of the commonwealth, and the final restoration of the house of the Stuarts, whereby English society and institutions were stirred to their profoundest depths, quite filled up the entire century. France, also, was agitated in every member of her body politic by the most bloody conflicts between Catholics and Huguenots. Reference has already been made to the part she bore in the Thirty Years' War. In the latter half of the century, she waged no less than three wars for the acquisition of territory—that against the Spanish Netherlands, the one against Holland, and a third against Austria, called the War of Orleans. Austria, too, in addition to the internal struggles with her Protestant members in the Thirty Years' War and her conflicts with France and Sweden, was called upon in the last quarter of the century to

quell a most formidable rebellion upon the part of Hungary, assisted by the Turks.

What admirable opportunities these numerous struggles between the leading powers of Europe afforded for the rise of men of superior administrative and military abilities; nay, what necessity did they lay upon the century for the production of such personages! And the history of the times assures us that the supply was fully equal to the demand. Of the illustrious military leaders of the age, the Netherlands furnished Tilly, William III. of Orange, and Admiral Tromp; Bohemia, Wallenstein; Sweden, Gustavus Adolphus and Charles Gustavus; France, Turenne and Condé; Germany, Frederick William, Elector of Brandenburg; Austria, Charles of Lorraine; and England, Cromwell and Admiral Blake. Though diplomacy and statecraft played a comparatively inconspicuous part in the great national games of the century, their functions, as in Cromwell's case, being very generally swallowed up in the prerogatives of the ruler, yet did they give rise to a Buckingham and

Hampden in England, and a Richelieu and Mazarin in France.

But religious and political contentions of the widest and fiercest character not only did not consume the mental resources of the seventeenth century, but seemed rather to incite and augment intellectual movements of every description. Especially was this the case in France. So unprecedented was the development which took place in the reign of Louis XIV., in foreign and domestic commerce, in home industries, in divers schemes of colonization, in the erection of splendid buildings, both public and private, in the creation and adornment of parks, and in the public patronage of the arts, the sciences, and literature, that it has well been styled the Golden Age of France. Dramatic poetry attained its crowning excellence in Corneille and Racine, and comedy in Molière; while Boileau, LaFontaine, Fénelon, and Bossuet won distinction each in his peculiar literary vein. The fine arts had such illustrious representatives as Nicholas Poussin and Claude Lorraine, while French philoso-

phy realized its founder in the eminent Descartes.

Not alone in France, however, was there manifested this spirit of universal aggressiveness. In all her neighboring states of Western Europe it was also displayed, though not with such prevailing and astonishing brilliance. In England it experienced two widely different but quite equally glorious manifestations—the one a literary flowering, with Milton, the sublimest of poets, Bunyan, the most ingenious of allegorists, and Butler, the bitterest of satirists, as its consummate types. The other was a movement in which England figured as the monopolist of the scientific progress of the century, as proven by the works of the great expounder and propagandist of inductive philosophy, Francis Bacon ; by the discoveries of the fundamental properties of light and the law of gravitation by Newton ; and by the demonstration of the true theory of the circulation of the blood by Harvey.

On the continent, outside France, its chief display was in the direction of art, to which

it supplied such noted names as Van Dyck and Rubens, of the Flemish school; Rembrandt, of the Dutch; Rosa, Guido, Zampieri, of the Italian; and Ribera, Velasquez, and Murillo, of the Spanish.

CHAPTER XVI.

ENVIRONMENT.—INFLUENCE OF THE AGE— CONTINUED.

The Eighteenth Century—Its Wars and their Great Generals—Its Industrial and Commercial Progress—Development of the Arts, Sciences, and Literature—Dominancy of French Ideas—England's Contribution to the Literary and Scientific Triumphs of the Century.—The Nineteenth Century—Rise and Spread of the Doctrine of Popular Sovereignty—The Wars of Napoleon Bonaparte—The American Rebellion—Non-military Currents of the Century—The Rise of the Romantic and Idealistic Schools of Writers; their Displacement by the Realists—Marvelous Development of the Sciences—Imprints of the Characteristic Social and Political Movements of the Age upon Modern Music and Art.

It would be difficult to conceive of times of intenser national commotion than those constituting the eighteenth century. One unbroken succession of wars throughout Europe quite filled up the whole period. First in order of time was the War of the Spanish Succession, which took place between France and a part of Spain on one side, and Austria, Prussia, England, and Holland on the other. Then, partly con-

temporary with the foregoing, occurred the remarkable engagements, known as the Northern War, between Charles XII. of Sweden and Peter the Great of Russia, assisted by Poland and Denmark. In the second quarter of the century we encounter the War of the Austrian Succession, in which Austria and England supported the claims of Maria Theresa against Prussia, France, and Bavaria. The third quarter was signalized by the bloody and ruinous Seven Years' War, with Austria, France, and Russia leagued against Prussia, aided by England and a few of the German states; while into the last and most sanguinary quarter of all were crowded the several wars between Russia and Turkey, the struggle resulting in the partition of Poland, and the appalling French Revolution. England experienced during the century, at home, two several attempts to restore the house of the Stuarts to the throne, and, abroad, the irretrievable loss of her American colonies.

As has been already observed several times, so again did it happen that the large

demands of the century for men qualified to direct its numerous and gigantic military operations were productive of an adequate supply ; for on its battle-fields we meet with such soldier geniuses as Charles XII. of Sweden, Peter the Great of Russia, Prince Eugene of Savoy, the Duke of Marlborough and Lord Nelson of England, Frederick I. and Frederick II. of Prussia, Kosciuszko of Poland, and Washington of America.

So sulphurous an atmosphere and so crimson a soil as those of the eighteenth century would, at first sight, seem wholly hostile conditions for the growth of agriculture, trade, the industries, art, science, and literature, which are generally supposed to be the natural products of peaceful times. But so it came to pass that the mighty military and political convulsions of the century agitated also the more distinctively intellectual centers, and set them in a state of extreme flux and reflux. Accordingly we find such foremost generals as Peter the Great and the two Fredericks of Prussia quite as zealous, courageous, and effective in developing the

industrial, commercial, and civilizing interests of their several nations as they were in promoting their military and political welfare. The arts, sciences, and literature were fostered not only by the leading potentates of the age, but also by petty princes, who severally sought to make their courts and capitals attractive to men of celebrity, and who stimulated the efforts of poets and literati by rewards and distinctions. And so in Germany especially, during the second half of the century, literature, science, and music realized a development and exercised a refining influence such as modern history can hardly parallel. Letters, in one or other form, had such worthy cultivators as Klopstock, Lessing, Herder, Wieland, Goethe, Schiller, and Richter, while the various phases of philosophic thought found expositors in such men as Lavater, Nicolai, Jacobi, and Kant. A hitherto insignificant species of refinement received a phenomenal impulse in the eighteenth century—we mean music, intoned by such incomparable masters as Bach, Handel, Gluck, Haydn, Mozart, and Beethoven.

In France, also, all varieties of intellectual endeavor found many and worthy votaries; indeed, French ideas, sentiment, style, and language quite dominated the intellectual and governing circles of all Europe during this century. Particularly was this true of the literature of France during the latter part of the century. In it, all existing and hitherto revered institutions, whether civil, ecclesiastical, or social, were ruthlessly assailed, and because they were found to contain not a few real blemishes and abuses, the whole fabric of existing society, it was proposed, should be dashed in pieces, and an entirely new order of things substituted. Foremost among the disseminators of these iconoclastic ideas were the satirical Voltaire, the earnest Montesquieu, and the romantic Rousseau. France's contribution to the eminent scientists of the age was also very considerable, D'Alembert, Buffon, Laplace, Linnæus, Lavoisier, and Bichat being of the number.

England, too, paraded her full quota of intellectual conquerors. In literature, the

taste for the ancient classical writings, which sprung up in the latter part of the seventeenth century, grew and extended itself quite over the first half of the eighteenth, bringing about such representatives of a symmetrical, delicate, and polished style of composition as the poets Pope and Swift, and the prose writers Addison, Johnson, and Burke. Later, however, this formal and highly artificial style gave place to a freer, more natural method, as seen in the poems of Thomson, Gray, Goldsmith, Burns, and Cowper. Two new literary forms appeared during the century—the essay, initiated by Steele, Addison, and Swift, and a little later revived by Johnson; and the novel, or prose fiction, with Defoe, Richardson, Fielding, Smollett, Goldsmith, and Sterne as its preëminent creators. History, though not originating in the century, experienced its most splendid fulfillment in the writings of Hume, Robertson, and Gibbon. In science, there appeared one of the most gifted of investigators in Newton, and one of the most renowned of inventors in Watt. Of statesmen and ora-

tors, we meet with such brilliant examples as Pitt, Fox, Walpole, Burke, and Sheridan. Of divines, there were the world-renowned Wesley and Whitefield. And of artists: Hogarth, the satirist and moralizer; the founder of English landscape painting, Wilson; the celebrated portrait painters, Reynolds and Gainsborough; and the historical artists, West, Barry, and Copley.

Even youthful America may claim to have furnished the century several perennial names, such as the Adamses, Hamilton, Franklin, and Jefferson.

THE NINETEENTH CENTURY.

The most characteristic feature of the nineteenth century was the rise and triumph of the principle of popular partnership, if not sovereignty, in the affairs of government. The reign of monarchical absolutism, except in Russia and Turkey, was forever terminated, and the participation of the masses in the making of the laws by which they were to be governed, and also in the administration of the same, was assured. As tro-

phies of this popular victory, we witness the achievement of the national integrity and independence of Greece, of Italy, and of Belgium, the unification and autonomy of Germany, and the oscillation of France between communism and absolutism, finally subsiding in a republican form of government.

Estimable indeed must we regard these national results, if we but consider the enormous price in blood and treasure that was paid for them. The whole continent of Europe, from the frozen heart of Russia to the flinty pillars of Hercules, and from the shores of the North Sea to those of the Black Sea, was marched over and battled upon by armies, some of which in numbers and equipment had not been equaled since the days of Alexander and Xerxes; and, responsive to the exigencies of the time, there also arose a captain whose genius for military exploits was certainly not surpassed, if indeed matched, by that of any commander either of ancient or modern days—we mean, of course, Napoleon Bonaparte. Other lesser, though still great, commanders were the

English Wellington, Nelson, Raglan; the Austrian Archduke Charles; the German Blücher and Von Moltke, and the French Ney, Murat, and MacMahon.

But not alone in Europe were momentous political and martial events transpiring. Half-way between the third and fourth quarters of the century, there occurred the supreme event of interest on the Western Continent—the testing of the ability of the Republic of the United States to maintain its integrity. And when we consider the magnitude of the ensuing struggle—the vast number of men marshaled on each side, the treasure expended, the number and ferocity of the battles fought, the extent of the field of operations, and the length of the contest—the American Rebellion must be recognized as one of the greatest, if not the greatest, single war of the century. Of the numerous generals of more than ordinary ability that this civil struggle brought to view, Ulysses S. Grant and Robert E. Lee must be regarded as the most conspicuous representatives of their respective sides.

Surpassing in magnitude and brilliance as the military operations of the present century must be allowed to be, when compared with those of preceding centuries, it can hardly be claimed that they hold as high a degree of relative preëminence as do the non-military achievements of the century. Absolutism, not only in its political form, but in every form, was irreparably burst in pieces by the internal ferments and expansions of the age. The paralyzing reverence for existing trammels, whether in religion, science, art, literature, or politics, was suddenly thrown off, and men everywhere shook themselves as if recovering from a stupor, and suddenly caught glimpses of a day of better things.

This tendency of the nineteenth century toward growth, expansion, and largest liberty of thought and action, has left the foot-prints of its remarkable progress very plainly upon modern literature. It first stormed and demolished what remained of that stronghold of literary despotism — eighteenth-century classicism — numbering

in its ranks such valiant yeomen as Byron, Shelley, Scott, Richter, Tieck, Schlegel, Novalis, Manzoni, and Heine. Then, as the icy control of the hitherto privileged classes gradually melted away before the hot breath of the uprising masses, these romantic and idealistic writers in their turn gave place to a school of realists, whose mission it was to depict the various classes of society, but especially the middle and lower classes—the hitherto ignored elements—with all possible fidelity. Conspicuous among these portrayers of living persons and contemporary scenes, we notice such writers as Dickens, Thackeray, George Eliot, Victor Hugo, Balzac, George Sand, Dumas, and Uhland.

But the most notable, and doubtless the most immediately serviceable, departures from eighteenth-century traditions are to be met with in the domain of science. Excepting the law of gravitation, the most fundamental and comprehensive truths ever known to science have been brought to light during the present century—a very natural, nay, an all but inevitable result. Scientists never

have been wanting in the spirit of investigation; but in days gone by this spirit has been so obstructed in its natural activity, both by private and by public narrowness, as to jeopardize its very existence. But the political cyclones of the early years of the present century swept away, with civil despotism, all priestly interference with the obviously non-priestly concerns of science. The scientist might now bring nature face to face with mankind, and bid her speak in her own clear, cogent, and fascinating objectivity to the human understanding. And the natural result has been that in the last fifty years men have become acquainted with more and greater truths concerning the material universe, and have thereby possessed themselves of more and greater appliances for ministering to their material well-being, than in all past ages combined. Such grand physical truths as the conservation and correlation of all forms of energy, the glacial theory, the undulatory theory of light, heat, and sound, and the doctrine of evolution, have been revealed and demonstrated

through the labors, directly or indirectly, of such investigators as Lyell, Darwin, Agassiz, Spencer, Huxley, Lubbock, Bain, Romanes, Helmholtz, Clerk Maxwell, Morse, Tyndall, Edison, Bunsen, Kirchhoff, Marsh, Wallace, Von Baer, and Pasteur, resulting in the present advanced condition of the sciences of astronomy, geology, psychology, chemistry, and electricity, and in the origination of such others as biology, archæology, sociology, philology, and photography.

The fierce political and social storms of the century produced some unique and admirable effects in the musical culture of the period. We have already referred to the great creative work accomplished by the six master composers of all time, in the latter part of the eighteenth century. They won for music what the ancient Greeks did for architecture—the establishment of certain grand orders of composition, which in harmony of proportion and exquisite finish of parts have come to be acknowledged as classical. Their less gifted successors of the nineteenth century, realizing the impossi-

bility of remodeling or adding to the glories of these Doric, Ionic, and Corinthian temples of harmony, and yet feeling unwilling any longer to worship exclusively therein, wisely betook themselves to the construction of humbler and more familiar forms of composition. They seized upon the folk-sagas of the day, upon popular Christian sentiments, upon enthusiastic conceptions of woman, and upon the exploits and sentiments of chivalry, and while treating these themes with becoming warmth and freedom of style, imparted also to their compositions much of national feeling. And thus was ushered into being the lyrical—the romantic—period of musical composition, illustrated, in one or other of its ramifications, by such writers as Schubert, Weber, Spohr, Mendelssohn, Schumann, Meyerbeer, Cherubini, Auber, Rossini, Boïeldieu, Verdi, Callcott, Balfe, Wallace.

With all of the foregoing composers, to a greater or less degree, melody, simple and sensuous, became the breath of life of their songs and operatic creations. Beginning a little later in the century, however, and com-

ing down to our own day, this last-named element of vocal and instrumental composition would seem almost wholly to have disappeared, giving place to a speaking, declamatory method in voice music, and to what is alleged to be a highly descriptive and minutely picturesque style in instrumental pieces. The foremost exemplifier of this latest school—the futurists, as they are called—is Wagner, with such illustrious associates as Berlioz, Liszt, and Rubinstein.

The various epochs already noted in the history of the literature and music of the nineteenth century are also discernible in that of art. Early in the century we meet with what is called a classical school. This was a decided departure from the affectation and indecency characteristic of the art of the latter half of the eighteenth century, and was brought about by a renewed attention to Greek art, consequent in part upon the excavations made at Pompeii. As a result of this study of the works of classical antiquity, properer conceptions of the symmetry of the human form and greater skill in por-

traying the same were attained by artists, prominent among whom we may name such French painters as David, Gerard, J. P. Regnault, Gros, and Prudhon.

But against the severe restrictions of this classical school there speedily followed a reaction, in keeping with the political and literary currents of the times, in favor of greater freedom, both as regards subject and treatment—a freedom that drew its inspiration directly from nature and the social happenings of every-day life. This movement, which had its inception among David's own pupils, was styled the romantic, Ingres and Delacroix being its leading French exponents. In Germany the same reaction was called the preraphaelite, its chief representatives, Overbeck, Cornelius, and Kaulbach, believing that the decadence of art dated from Raphael, and that therefore a return to pure motives and correct methods could only be secured by a study of the predecessors of that great artist.

Another of the pronounced phases of art in the present century was the vigorous re-

vival—we might almost say creation—of landscape painting, properly so considered, indicative, no doubt, of the growing interest of the age in its physical surroundings. Its most meritorious interpreters were Rousseau, Corot, Millet, Decamps, Turner, Constable, and Crome.

Two diametrically opposite tendencies in painting, whether of figures or of landscapes, have marked its later manifestations—the one, called for a second time *preraphaelite*, which lays extraordinary emphasis on minuteness and truthfulness of details, and is represented by Rossetti, Hunt, and Millais; and the other called the *impressionist*, which stakes its all of merit upon broad and general effects, the same being exemplified by the works of a number of well-known living painters, particularly of the French school.

CHAPTER XVII.

ENVIRONMENT.—INFLUENCE OF THE AGE— CONTINUED.

The Relations as to Cause and Effect of the Genius and His Epoch.—When the Most General Interests of Society or the State are to be affected, the Initiative of Influence Inheres in the Mass—Illustrated in such Movements as the Reformation, the French Revolution, and the American Rebellion.—When the Immediate Effects of a Movement are necessarily restricted to a few, then the Individual, the Genius, becomes the Initiator—Illustrated in the Rise and Propagation of Various Scientific Theories, and in the Formation of the Various Schools of Art, of Music, and of Letters.

In considering, then, somewhat particularly, the centuries which have been most prolific in geniuses, we find them to be the very ones that have given birth to and matured the widest, intensest, and most radically revolutionizing of movements, whether of a political, religious, industrial, intellectual, or æsthetical nature, that have happened in the history of mankind. This fact would seem to prove that great geniuses and great epochs go together—that where grand sociological dramas are enacting, there is

always present an adequate company of superior actors—in fine, that where a general need is felt, there must forthwith arise an all-sufficient supplier. The co-existence of the two is undeniable; but do they stand related to each other as cause and effect? And if so, which of the two is the cause? This is almost, if not quite, as puzzling a problem as that biological one—which is primordial, the egg or the chicken? So far as human experience can inform one, neither is possible without the antecedent existence of the other. Is it equally true concerning the genius and his epoch? Does the latter hatch the former, or is the genius the creator of his age?

A somewhat careful consideration of the question convinces us that neither of these factors is uniformly antecedent, and that each takes its turn as the initiator. And this is the rule, it would appear, for determining the order of their precedence: When the interests to be affected are of a very general character—such as those of society, of state, and of church—then the initiative of change

inheres in the mass—in the social, political, or religious atmosphere, as it were, of the times, rather than in the preponderating influence of any individual. On the contrary, when the immediate effect of a movement is by its very nature restricted to the few, as is primarily the case with all changes that appertain to the scientific or æsthetical status of an epoch, then the primary impulse is found to proceed from an individual of extraordinary force—the genius. Let us see if this theory is sustained by well-known facts.

First, let us test it in relation to those great events of history that have interested, aroused, and transformed whole nations and peoples. The Reformation was such an event, and Martin Luther its most conspicuous figure. Did Luther originate the Reformation, or was he merely a product of it? This is readily determined by the fact that, fully one hundred years before Luther's day, Wickliffe, in England, and Huss and Jerome, in Germany, decried and combated the very same abuses that Luther afterward attacked.

But even these earlier reformers were simply the heralds and van-guard of a large and daily increasing number of the general body of professing Christians, who had long before discovered for themselves the corruptions, both in doctrine and in practice, that had crept into the church, and who were desirous of, and at times not a little clamorous for, their removal. And it was this same general clamor, sounding down the whole preceding century, and gathering volume with every decade of its progress, that aided in arousing Luther's indignation, and finally emboldened him to strike to the ground the brimming cup of the church's iniquity.

The French Revolution was another event not only of national but even of continental importance. Are we to infer that this great political and social upheaval was the immediate effect of the revolutionary doctrines sown by the writings of such men as Voltaire, Montesquieu, and Rousseau, or, later, the direct fruits of such inflammatory leadership as that of Mirabeau and Robespierre? Doubtless the influence of the

French illuminative philosophy and the Parisian spirit of the age upon the more scholarly classes throughout all Europe was great ; and we know that substantial reforms, such as the abolition of the order of the Jesuits, of the Inquisition, of serfdom and feudal duties, the observance of religious toleration, and divers amendments in legislative and judicial affairs, were in large part to be attributed to the almost direct influence of the above-named writers. But the Revolution itself, which was the vortex into which every liberalizing tendency of the whole century was drawn, and there raised to the extremest tension, was for the greater part a movement of the illiterate and destitute masses—the very class upon which printed ideas and book-politics must of necessity gain but little, if any, hold. Certainly, if any commotion ever deserved to be called popular, it was the French Revolution—the uprising of the poor, the ignorant, the unprivileged masses against the rich, the schooled, and the privileged few. It was not a movement instigated by one trenchant pen,

inspired by one eloquent voice, or led by one skillful sword; but it was the *vox populi* itself, emphasized by a hurricane of unsoldierly weapons.

The late American Rebellion was another event of wide-reaching interest. Can it be alleged that this fratricidal struggle was brought about by the writings and speeches of certain abolitionists of the North and other certain pro-slavery advocates of the South? It would be idle indeed to deny that the persistent efforts of these agitators in both sections quickened the popular comprehension of the national evils involved, on the one hand, in the spread of slavery, and on the other, of the perils to the institution itself inevitable upon its limitation, and on both sides, added kindling and draught to very inflammable prejudices. But the natural and irrepressible antagonism that exists between free and enforced labor, especially in a government professing to be republican, the unquestionable superiority of the former in all material and practical respects—to say nothing of the relative humaneness and

moral justice of the two—these convictions and perceptions were realized to no small extent from the very beginning of the national experiment, and every year grew clearer, more general, and more influential. The utterances, therefore, of Northern abolitionists and Southern “fire-eaters” did not originate the popular conscience regarding slavery, but rather voiced it—did not inaugurate the War of the Rebellion, but simply prefigured it.

Let us now turn to the history of innovations of a less general scope than the foregoing, to such as arise in the development of science, of literature, and of the arts. Are these the outcome of popular foresight and insistence, or do they not rather originate with individuals of transcendent force—the geniuses of the race?

Had anything like a general dissatisfaction been expressed—nay, had even the then limited circle of scientists themselves manifested any disagreement with the prevalent notions of the Ptolemaic system of the universe—before the obscure astronomer of

Thorn, Nikolaus Copernicus, announced and demonstrated a totally different scheme of planetary arrangement—the scheme which now forms the basis of all astronomical science? Did Kepler, a hundred years later, promulge his three great laws respecting the orbits and motions of the planets, and did Galileo, about the same time, accomplish his discoveries and inventions in obedience to a popular demand, or stimulated by any sympathetic spirit of the age? Can it even be alleged of the great scientific truths that have come to light during the present century, to-wit: the conservation and correlation of all energy, the undulatory theory of heat and of light, the glacial theory, evolution, or of the great inventions of the century—the steamboat, the locomotive, the telegraph, the telephone, the phonograph, the sewing-machine, electric light, electric and hot-air motors—that these are the natural outgrowth of the general scientific sap-flow of the age? Not at all. Columbus, Copernicus, Kepler, Galileo, Newton, Watt, Stephenson, Fulton, Morse, Darwin, Agassiz, Edison—these are

not the passive reflectors of the concentrated scientific glimmerings of their respective ages, but, on the contrary, are they the active, the unique, the isolated generators—the solar and stellar emanators of hitherto unconceived physical ideas; and far from being encouraged, urged on, and cheered by contemporary popular sentiment, their strange notions and inventions have been almost invariably regarded as so many anarchistic bombs and infernal machines, stealthily placed under the foundations of legitimate science, for its immediate and complete destruction; while they themselves have been publicly denounced as crack-brained, impious, malevolent, and have been subjected to physical tortures, and even to death, at the hands of civil, ecclesiastical, and so-called scientific authorities. Indeed, we doubt if out of the whole bulk of the world's scientific treasures, past and present, a single idea or invention can be named to which the scientific spirit of any age, or the popular acumen of any locality, may lay the claim of paternity; nay, we feel authorized

in affirming that every scientific novelty the world has ever known has had to battle its way to public acceptance against the breast-works of popular prejudice, the bayonets of popular ridicule, and the red-hot shot-and-shell storm of popular persecution, and that their final triumph was due alone to the indomitable tenacity and inexhaustible pugnacity of their initiators—the scientific geniuses.

Next let us consider the history of the best known literatures of mankind—and first, as regards their most meritorious productions. Can it be said of the *Canterbury Tales*, the *Faerie Queen*, *Paradise Lost*, the *Divine Comedy*, *Jerusalem Delivered*, the *Decameron*, *Don Quixote*, *Hudibras*, *Shakespeare's Dramas*, *Faust*, *Don Juan*, *Les Miserables*, that they were the consummate bloom of seeds previously sown by the popular hand, and that their authors were therefore only the mouth-pieces, the amanuenses of the general intellectual dictation of their respective epochs? Do the receptions accorded these and kindred works by the

publics that witnessed their birth incline us to such an opinion? What past period of literary history can be named that proved a tenth part as appreciative of these master-works as is the present, removed though it is in some instances by hundreds of years from their natal day? Can it be said, then, that the authors of these greatest of literary works were schooled and incited to their achievements by the intellectual ferment of their several times? On the contrary, do not the facts compel us to affirm that these greatest authors owed but little, if any, of their inspiration to the literary atmosphere of their own day, and in their creative intentions were as little concerned about popular favor as the latter proved regardful of them? As the result shows, their labors, whether so aimed or not, were better adapted for posthumous than contemporary appreciation, and whatever they may have borrowed of fact, thought, sentiment, or style from their own or past centuries, they repaid the obligation with compounded interest, and in a coin whose image and superscription were as

surprisingly superior as they were immediately uncurrent.

Secondly, let us view the question of popular influence upon literary production as respects the various schools or fashions of literature—the classic, the romantic, the realistic. Have these fashions arisen at the bidding of public taste, were they concessions to popular demands, or, on the other hand, were they the joint fabrics of individual authors, whose tastes, more particularly as to style, chanced to run for a time in the same general direction?

On preceding pages we have endeavored to point out how that each of these literary periods conformed in its general spirit to the national humor then dominant. This fact can not be denied—the power of affairs of state, of church, and of social life to impart a characteristic tinge, at least, to intellectual productions. But this admitted, how inscrutable the *modus operandi* of such general influences, and how unsatisfactory the attempt to measure such with any exactness! It can not be likened unto the impact of cur-

rents of air upon æolian harp-strings, for in this case the latter—which would symbolize the author—are too completely passive agents. Rather let us say it is like the power of vernal breezes and sunshine upon song-birds—it provokes, invites, nay compels the exercise of a talent already existing and previously operative, though not so effectively so as now. Doubtless the bird could sing and would sing, whatever its physical environment; but the sweetness, gush, and duration of the song—are not these largely dependent upon atmosphere, sunlight, and sylvan quietude? Yes. But then is it not also true that the same physical conditions co-exist with very unequal expressions of song upon the part of different birds? These differing results must be accounted for, then, not by physical environments, but by the peculiarity of vocal organization in the songster.

Just so we believe it is with the characteristic expression of any particular literary epoch. All general influences, extraneous to purely literary ones, act as atmospheric

modifiers, which, by nitrogenizing obnoxious elements and oxygenizing agreeable ones, at length select into full flower the peculiar literary flora of the period. But the puissant seeds of that dominant flora reside alone in certain few heroic authors ; they are not the product of any community or period, but simply its fittest survival. And so, when we come to indicate the most potent, the essential of the causes that conspire for the production of any particular literary epoch, we must fix upon such unique literary geniuses as Chaucer, Dante, Shakespeare, Goethe, Richter, Burns, Scott, Byron, Hugo, Dumas, Dickens, Hawthorne, and the literary contemporaries who worked in sympathy with them.

Carrying now our inquiry into the realm of art, we shall not take our stand-point further back than the Renaissance of the middle ages. Why? Because our knowledge of the only deservedly noticeable art period prior to this—the Greek—is too scanty and inaccurate to enable us to decide with any satisfaction the question of the rel-

ative importance of the influence of the art-seeking community and the art-producing individual. We know fairly well that the centers of Greek population were very generally permeated, during the fourth and fifth centuries B. C., with a love, if not a passion, for the beautiful in form as relates to architecture and statuary; and we also know that in such sculptors as Phidias, Scopas, Praxitiles, and Lysippus they found presumably sufficient interpreters of their loftiest conceptions; but to which of the two factors belongs the preponderance of merit for bequeathing to all posterity architectural orders and sculptured representations of the human form that absolutely preclude either criticism or improvement, is a matter fitter for speculation than demonstration. We shall therefore move our point of observation some two thousand years nearer to our own times, and thus secure a field of vision comparatively clear. And so we find ourself transported from the midst of Greece's most flourishing art era into the field of the most wonderful florescence of all modern art—a

period eminently worthy of its illustrious predecessor of classic times.

Take the first period of Christian art, that which, originating in the catacombs of Rome in the second century, maintained its individuality almost to the fourteenth. Whence the inception of that general breaking away from the narrow, stiff, lifeless, unnatural, and prevailingly ecclesiastical conventionalism of this theologic period, which resulted in the adoption for the next three or four centuries of a method that drew its inspiration, as regards form, color, and accessories generally, directly from nature? Shall we credit the happy revolution to a sudden and compelling perception of the Italian people, or shall we not more likely find it in the influence that a certain Grecian sarcophagus exerted upon Niccola Pisano, and through him, more or less directly, upon all contemporary and subsequent sculpture and painting?

And the growth and final triumph of this naturalistic tendency of religious art—were they the outcome of the general interest taken in art productions and the munificent

patronage proffered them during the Renaissance, or were they not more immediately attributable to the bold, original, nature-loving, but God-fearing efforts of such representative artists as Giotto, Masaccio, Fra Angelico, Da Vinci, Angelo, and Raphael?

We may concede that people generally had grown weary of the crudities of design—the long, near-placed, half-shut eyes; the flat figures, heavy outlines, badly-drawn extremities, and lack of perspective, upon which their eyes had been obliged to gaze for ten or more centuries past, and were anxiously casting about for something more satisfying; but is it at all probable that they generally realized in just what particulars their art was deficient, and just what heroic treatment would set it right? However that may have been, we are certain of this—that the master-artists last named did discover the defects, discovered also their remedy, and were courageous enough to act up to the fullest dictates of their intelligent perceptions. It was they who stripped art of its

ill-fitting externals, and preserving all that was genuinely immortal of it—its spirituality—rehabilitated this in the lovely vesture of the art of ancient Greece and still more ancient Nature. The public simply approved the regeneration, and heartily promoted it.

Why, the fact that the history of art is the history of *schools*, each with its one or two master-spirits, whose peculiarities were sedulously imitated and multiplied by all the disciples of that school, would of itself be decisive of the point that the individual, rather than the mass, is the dynamic agent in the production of the various aspects of art development. Da Vinci, Angelo, Raphael, and Titian were contemporaries, and Fra Angelico lived but a generation or two earlier, and all were therefore subjected to the same general political, religious, literary, and social influences; and yet how radically distinct was not only each one's style of work, but also each one's art motif! No one of them was conventional; but, contrariwise, they were all preëminently unique, aggressive, iconoclastic.

What influence, or influences, of a general nature may account for the invention of oil-painting by the brothers Van Eyck, and the ensuing rise of that army of painters which, under the lead of such artist-generals as Dürer, Holbein, Rubens, Van Dyck, Teniers, Rembrandt, and Kaulbach, spread all over Europe north and northwest of the Alps, and whose distinguishing characteristics were elaboration and truth of detail, delicacy of execution, richness of color and ornament, accessories copied from ordinary life-scenes and highly finished, figures pre-eminently realistic, and backgrounds of natural scenery? Moreover, if it were social environments rather than the initiative talents of the individuals just named that begot the Flemish, German, and Dutch schools of art, how did it happen that the art tendencies came to be so numerous and so heterogeneous; producing at one and the same time portrait painters, genre painters, painters of landscape, of animals, of water, of interiors, of architecture, and of still life? The influence of a whole people, the impulse

of an age, the weight of a century, ought, it would seem, to have produced results of a more consistent and homogeneous character.

But what shall we say of the art of England, which of all modern nations is, perhaps, the foremost in this line of æsthetical production? Though not as directly exposed to the great tidal waves of public opinion and action, that have surged back and forth over the continent, as her neighboring countries, yet is she too near the latter not to have felt in a very perceptible manner the shock of such mighty movements. Her political institutions and her literature clearly attest to the modifying effects of these influences from across the Channel; but her art, so preëminent, is yet wholly modern—indeed, almost entirely of nineteenth-century growth. It knows nothing of the ecclesiastical, the classical, the Renaissance, the preraphaelite, the naturalistic, the idealistic, or any other of the epoch-making terms of painting as applied to the history of art on the continent. It is unquestionably the art of individuals, and is as varied and idiosyn-

cratic as were the peculiar gifts of its creators.

In music, too, which, like English painting, is also of comparatively modern date, it is not easy to trace the effects of any very general influences. Even during so tumultuous a time as the 'Thirty Years' War, music seemed to have lived in a cloister—sacred from every rude touch. Particularly is this the case so far as regards the works of the foremost masters of the art. So different were they from all which had preceded them—so superior to all precedents—that they have been recognized as constituting a Renaissance in the history of music. What in the atmosphere of his day suggested to Bach his profound studies in polyphony and fugue composition? What popular demand incited Handel to the conception of his sublime tone-heroics—his oratorios—an art form never before known? Hardly less inexplicable was the impulse that led Haydn to the creation of his symphonies, Mozart to the production of opera, and Beethoven to the composition of works whose artistic com-

pleteness, depth, and exaltation of feeling no musician, either before him or since, has ever attained. The productions of the more immediate successors of these great tone poets, it must be allowed, do partake of a palpably popular, social, and national character ; but when we arrive at the latest, the present phase of musical development in the compositions of such artists as Berlioz, Wagner, Liszt, and Rubinstein, we again find ourself puzzled to assign any cause for its existence, outside the all-sufficient one of the unique and splendid endowments of the composers themselves.

CHAPTER XVIII.

ENVIRONMENT.—INFLUENCE OF THE AGE— CONCLUDED.

*The Inter-relations of the Genius and His Environment.—
Illustrated by a Well-known Fact of Vegetable Physiology.
—This View Flavored by Opinions of Grant Allen and
Herbert Spencer.—Summary of the Whole Subject by
William James.*

In preceding chapters we have considered, somewhat at length, the four varieties of human surroundings—the home and school, the physical or geographical habitat, race, and the various characteristic influences of the age, in their bearings, severally, upon geniuses. Let us now attempt, briefly, a comprehensive view of the entire subject of genius and its environment, to the end of determining the actual participation of the latter in the production of the former.

It is a fact well known to vegetable physiologists, that, when the natural forest growth in any locality has been destroyed, an entirely new species of tree will often appear in its place. This new growth, too, will be

found to be indigenous to a locality so remote from the place of its appearance that all the known theories of the dissemination of seed are wholly inadequate for accounting for the phenomenon. A recent writer* tenders this solution of the long-standing puzzle: The earth, he claims, is everywhere transfused with vegetable germs — not seed — which spring into palpable life-forms whenever the necessary physical conditions obtain. Every foot of soil is therefore capable of producing any vegetable growth that the physical environment of the time may favor, and as changes in the latter are brought about from time to time, either by artificial or natural agencies, there will result a correspondingly obvious change in the vegetable growths that appear.

Whether this theory be accounted scientifically sound or not, it may be made to serve as an illustration of a possible solution of our present inquiry, if we concede that genius is a sort of primordial germ, implanted in the human family much more

* R. W. Wright, in "Life—Its True Genesis."

widely than has generally been supposed, and which, whenever it meets with certain felicitous surroundings of time, place, and opportunity, bourgeons forth into extraordinary flower. In this case it is evident that the environment must count for at least half, if not more, of the joint product.

This last conclusion harmonizes with the opinion entertained by Grant Allen—if we may be allowed to apply his remarks concerning communities to individuals also. He says: “The differences between one nation and another, whether in intellect, commerce, art, morals, or general temperament, ultimately depend, not upon any mysterious properties of race, nationality, or any other unknown and unintelligible abstraction, but simply and solely upon the physical circumstances to which they are exposed. We can not regard any nation as an active agent in differentiating itself; only the surrounding circumstances can have any effect in such a direction. There is no caprice, no spontaneous impulse in human endeavors. Even tastes and inclina-

tions *must* themselves be the result of surrounding causes."

Herbert Spencer, too, in his "Study of Sociology," affirms: "Before he [the genius] can remake his society, his society must make him. All those changes of which he is the proximate initiator have their chief cause in the generations he descended from."

This last view, however, is, we think, very ably combated by a recent critic, William James, in the following passage: "If anything is humanly certain, it is that the great man's society, properly so called, does *not* make him before he can remake it. Physiological forces, with which the social, political, geographical, and, to a great extent, anthropological, conditions have just as much and just as little to do as the condition of the crater of Vesuvius has to do with the flickering of this gas by which I write, are what make him. Surely, Mr. Spencer does not hold that the convergence of sociological pressures so impinged on Stratford-upon-Avon about the 26th of April, 1564, that a

William Shakespeare, with all his mental peculiarities, had to be born there, as the pressure of water outside a certain boat will cause a stream of a certain form to ooze into a particular leak? And does he mean to say that if the aforesaid William Shakespeare had died of cholera infantum, another mother at Stratford-upon-Avon would needs have engendered a duplicate copy of him, to restore the sociological equilibrium, just as the same stream of water will reappear, no matter how often you pass a sponge over the leak, so long as the outside level remains unchanged?"

Confirmatory of the last view, Charles Darwin declares: "The immense majority of changes wrought in organisms are produced by internal molecular accidents, of which we know nothing."

Speaking of the same changes and their causes, Mr. James, above quoted, remarks: "In the first place, they are molecular and invisible; inaccessible, therefore, to direct observation of any kind. Secondly, their operations are *compatible* with any social,

political, and physical conditions of environment. The same parents, living in the same enviroing conditions, may at one birth produce a genius, at the next an idiot or a monster. The visible external conditions are therefore not direct determinants of this cycle; and the more we consider the matter, the more we are forced to believe that two children of the same parents are made to differ from one another by a cause which bears the same remote and infinitesimal proportion to its ultimate effects as the famous pebble on the Rocky Mountain crest, whose angle separates the course of two rain-drops, itself bears to the Gulf of St. Lawrence and to the Pacific Ocean.

“The causes of the production of great men lie in a sphere wholly inaccessible to the social philosopher. He must simply accept geniuses as data, just as Darwin accepts his spontaneous variations. For him, as for Darwin, the only problem is, these data being given, how does the environment affect them, and how do they affect the environment? Now, I affirm that the relation of the

visible environment to the great man is in the main exactly what it is to the variation in the Darwinian philosophy. It chiefly adopts or rejects, preserves or destroys—in short, *selects* him. And whenever it adopts and preserves the great man, it becomes modified by his influence in an entirely original and peculiar way. He acts as a ferment, and changes its constitution, just as the advent of a new zoölogical species changes the faunal and floral equilibrium of the region in which it appears.

“The mutations of societies, then, from generation to generation, are in the main due, directly or indirectly, to the acts or the example of individuals whose genius was so adapted to the receptivities of the moment, or whose accidental position of authority was so critical, that they became ferments, initiators of movements, setters of precedent or fashion, centers of corruption, or destroyers of other persons, whose gifts, had they had free play, would have led society in another direction.

“The fermentive influence of geniuses

must be admitted as, at any rate, one factor in the changes that constitute social evolution. And thus social evolution is a resultant of the interaction of two wholly distinct factors : the individual, deriving his peculiar gifts from the play of physiological and infra-social forces, but bearing all the power of initiative and origination in his hands ; and, second, the social environment, with its power of adopting or rejecting both him and his gifts. Both factors are essential to change. The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community.”

This, as it seems to us, is a frank, clear, and plenary statement of the real inter-relations that subsist between the genius and his environment, and as such shall constitute our final word upon this part of the subject.

CHAPTER XIX.

ATTITUDE OF THE PRESENT AND THE FUTURE TOWARD GENIUSES.

The best that is possible has been already attained in Architecture, in Sculpture, in Human Figure-Painting, in Literature, and in Music.—Possible Exceptions as regards Historians, Critics, and Fictionists.—Inferiority of the Poetry of the Present Day.—Scientific Discovery and Mechanical Invention the only Fields open to Future Geniuses.—Science comes to the Rescue of the Non-Scientific Mind from Mediocrity, by Her Promise of a Future in which the Human Family will far surpass all its Antecedent Experiences, in Brain-power and Organization.—Uncertain Nearness of Such Promised Novum Organum.—Relativity of Greatness.

It has been said that the age of pyramids, pantheons, and cathedrals has forever passed by. May it not be affirmed with equal probability that the world shall never again behold a pyramidal Angelo, a pantheonian Shakespeare, a cathedral Milton? The human mind is finite, and therefore is not susceptible of infinite expansion. In not a few directions, it would appear the utmost limit of human achievement has long ago been reached; and what the race has since

been able to accomplish in these directions has fallen, and most probably ever will fall, more or less below the high-tide marks of by-gone days. One of those unsurpassable attainments is architecture.

If massiveness and grandeur be sought, the architect of to-day must go back four thousand years to the cities and monuments of the Nile and of Northern India, where, among the ruins of those ancient civilizations, he will find them in unapproachable perfection. If symmetry of outline and proportion and chaste beauty of ornamentation be in request, the very essence and soul of these he will find incarnated in the still flourishing orders of ancient Greece. But if poetic or religious effect be in demand, nowhere will he realize these so completely as in that petrified duplicate of Nature's own vital architecture—the Gothic. May a man ignore these venerated sources and yet dare to call himself an architect? or may he essay to rival any one of them and not end his days in a mad-house?

Closely related to architecture is sculpture;

and in this art also all modern efforts are invariably regarded as successful only in so far as they approximate the models set up by Greece more than twenty-five centuries ago. In painting, too, in so far as its object be the delineation of the human form, its cultivators must have recourse to the antique studio last named.

Of all the various branches of literature, there are but two whose present status is that of growth and improvement as compared with former conditions; these are history and criticism. And yet, even in these, for what is gained in accuracy, thoroughness, and fairness, there is perceptible a sad diminution of old-time picturesqueness, eloquence, boldness, and those rhetorical strokes which always so fascinate and impress the student. Not to speak of such literary potentates as Spenser, Milton, Shakespeare, Dante, Ariosto, Boccaccio, Johnson, Burke, Pope, Goldsmith, Cowper, Burns, Goethe, Schiller, Richter, Cervantes, Molière, and Voltaire, who will name among living authors the peer of each of these more

modern literati: Sir Walter Scott, Dickens, Thackeray, "George Eliot," "Georges Sand," Victor Hugo, Balzac, Byron, Macaulay, Carlyle, Lamb, John Wilson, De Quincey, Shelley, Hood, Moore, Longfellow, Hawthorne, Irving, Prescott? In the line of fiction there are undoubtedly at present a large number of very able contributors, and every now and then a volume is brought out which, like "Ben Hur," or "Vittoria," or "Paul Patoff," proves a crown of aromatic evergreen upon its author's brow.

In the poetry of the present day, however, a wonderful contrast is presented with all that has preceded it. When one regards the painful, frantic efforts made by living poets in their verse-bearing, he is very much inclined to suspect the seasonableness of the product. In a large majority of instances it does not conform even to the outward semblance of poetry, the greatest possible inequalities existing between the quantities of its lines and stanzas, and its paces falling upon the ear as though every foot of its centipedal body were shod in the newest and

clumsiest of wooden shoes. But not only is its rhythmic structure frightfully unique and fantastical; its sense, if any there be, is so involved in unusual phrases, and so masked by subtle allusion, that one is disposed to regard the whole product as so much versified mysticism or rhymed metaphysics. For poetry simple, sensuous, sonorous; for poetry that takes possession of the whole being—the eye by its form, the ear by its music, the mind by its symbolism, and the soul by its emotion—for this supremest of human products, one must have recourse to days gone by. The last fifty years have not witnessed the birth of a single great poem; while of poems of a minor rank, though still of a hardy if not perennial nature—like, for example, “The Deserted Village,” “Childe Harold,” Gray’s “Elegy in a Country Church-yard,” “The Cotter’s Saturday Night,” “Evangeline,” “In Memoriam,” “Thanatopsis,” “Snow-Bound,” “Marco Bozzaris,” the same half-century is singularly and lamentably destitute.

Since penning the last paragraph—indeed,

just before going to press—an anonymous article from the *Boston Herald* came to hand, which reiterates in substance what we have just alleged concerning the unpromising aspects of the poetry of the present day. Here are a few of its most significant utterances :

“The important question asked at this moment is whether we have any poets who can take the place of Browning and Tennyson in England, or of Whittier and Lowell and Whitman, who now have lead in America. It is not easy to answer this question. The indications in both countries are that no writers of equal strength have yet appeared. The fact is slowly coming home to us that we are at the close of a great age of poetry, and the unexpected and sudden death of Browning will do much to impress this fact more strongly upon us.

“We are entering upon a new poetical age, in which there is a more immediate response to the spirit of the hour and less range for originality in subject or in its treatment. It is not likely that in the next quarter of a century any poet will come forward to take

the place occupied by men like Browning or Tennyson. In their cases, the devotion to poetry has included a rare consecration of all their gifts, and nothing in the way of discipline or painstaking was beneath their effort. There is not the same consecration of gifts among the poets of to-day to this end, and it would be hard to point out in Europe or America a single writer of poetry who is doing really great work."

In music, when we take into account the Russia-like extent of the empire already won by such autocrats of tone composition as Bach, Beethoven, Mozart, Haydn, Handel, Rossini, Weber, Schubert, Mendelssohn, Schumann, Berlioz, and Wagner, what territory is there left, it may well be asked, of the conceivably desirable, for future aspirants to occupy?

On only two lines of intellectual endeavor, as it appears to us, does the future hold open the gate of opportunity to the ambitious; and those are scientific discovery and mechanical invention. So remarkably fruitful have the past fifty years been in the number

and importance of their scientific triumphs, and so many and so highly advantageous has been their yield of mechanical contrivances, that one is bound to regard the careers of these branches of human exploit as on the ascendant. And this impression is deepened when we consider the field that is open in these directions—the physical universe, no square inch of whose vast extent has as yet been worked to exhaustion, and innumerable of whose forces have as yet been wholly unsubjected to economic ends. Though jealous of her esoteric truths—it may be uncompromisingly so—yet has nature ever shown herself to be ready of speech, intelligible, and richly informing to all who importunately interrogate her.

What is life? Which is first in order of time, protoplasm or the organism? How do purely immaterial volitions become transmitted into purely material movements, and *vice versa*? How do merely physical sensations become changed into strictly psychological phenomena? What the origin, nature, and pathology of such dread maladies as

leprosy, cholera, and hydrophobia? What the utilization of such waste natural power as that of water-falls? What the further application to mechanical ends of electricity, hot air, and solar heat? What a more certain knowledge of the coming and course of storms and the discovery of controlling or dissipating agencies? These are a few of the more than twelve labors imposed by that modern Eurystheus, Science, upon living and future investigators of natural phenomena. And what an opportunity they afford—nay, what a necessity would they seem to create for the uprising of numerous Herculean and Samsonian physicists!

Satisfactory as this outlook may prove to the two favored classes of workers, the scientists and their practical coadjutors the inventors, it is wholly discouraging to all other classes of intellectual toilers—that vast multitude of men of letters and of æsthetics. Is it a settled matter that the possible achievements of these latter aspirants are to become more and more circumscribed with each oncoming decade, until, within a half-

century or so from the present, the researches and contrivances of science shall engross the intelligent attention and brain-power of the world?

Just at this sorry juncture, science herself comes to our relief, and projects a jet of wonderful light upon our dark misgivings. One of her latest interpreters, M. Fouillee, affirms that the brain of future races will be, not only in volume, but also in organization, as superior to the brain of existing races as the latter is to the brain of simple vertebræ. This being the case—and who will dare to doubt the *ipse dixits* of modern scientists?—it is certainly not improbable that the melioration predicted will affect impartially all human minds—the non-scientific equally with the scientific! In which event, is it not also probable that the literary and the æsthetic, as well as the scientific, attainments of the future will excel those heretofore made, by as prodigious a remove as the latter exceed the achievements of the prehistoric man? Of course, in this case, it will follow that the geniuses of the future will

be as superior in capacity and ability to those of the present and the past as these were superior to their now forgotten contemporaries. Does not the mere contemplation of so surpassingly brilliant an epoch cause one to experience premonitory symptoms of that predicted cerebral enlargement and refinement?

Evidently the satisfaction derivable from this promised *novum organum* very much depends upon its possible proximity. Shall we who now live, or shall our near progeny, experience its advent and partake in its transcendent felicities? The scientists have announced a golden age, but they have, strangely enough, forgotten to advise us of the time of its arrival. Are we to infer, therefore, that its approach proceeds at the same leisurely pace as marks most other great physical evolutions—for example, the formation of the successive strata of the earth's crust, or the development of distinct celestial spheres out of chaotic star-dust? If so, then may we well forego all interest in the announcement, and fall back upon our

so measured, the later investigator, though working in much higher strata of knowledge, may not rank himself above his predecessors—the developers of lower-level phenomena.

[THE END.]

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